

No. 15249

United States
Court of Appeals
for the Ninth Circuit

C. S. JOHNSON COMPANY, a Corporation,
Appellant.

vs.

MERLE W. STROMBERG, Doing Business as
California Batching Equipment Co.,
Appellee.

Transcript of Record
In Two Volumes

Volume II
(Pages 311 to 654)

Appeal from the United States District Court for the
Southern District of California,
Central Division.

No. 15249

United States
Court of Appeals
for the Ninth Circuit

C. S. JOHNSON COMPANY, a Corporation,
Appellant.

vs.

MERLE W. STROMBERG, Doing Business as
California Batching Equipment Co.,
Appellee.

Transcript of Record
In Two Volumes

Volume II
(Pages 311 to 654)

Appeal from the United States District Court for the
Southern District of California,
Central Division.

(Testimony of Carl W. Tilden.)

The Court: Do you know what causes the balling up in the mixer?

Mr. Sellers: No one asked him that, your Honor.

The Court: You don't do you?

The Witness: No, sir. I don't know what causes it.

Mr. Sellers: But, your Honor, is that essential? If you would obtain raw material from two different sources and [247] then pass it through the same——

The Court: Now, just a minute.

Mr. Sellers: Yes.

The Court: How many times have you been by the truck when you observed the balling up of this material?

The Witness: I have been by a truck, I believe, twice.

The Court: When was that?

The Witness: Last summer.

The Court: Where was it?

The Witness: Excuse me. The previous summer.

The Court: The summer before last?

The Witness: 1954, right.

The Court: Where was it?

The Witness: That was right here in Los Angeles County out on a flood control project.

The Court: What kind of batching plant was it?

The Witness: The batching plant was a cement with side entry on his plant. I don't know who made the plant.

The Court: All right. Now, where was the other experience?

(Testimony of Carl W. Tilden.)

The Witness: The other experience was at the same time of the year out in the San Fernando Valley on a similar project.

The Court: What kind of a plant was it?

The Witness: It was a home-made batch plant with cement [248] screw side entry.

The Court: Are those the only two experiences you can remember?

The Witness: That I was standing beside the truck, yes.

The Court: That is, that you observed personally?

The Witness: Those are the only two, but I hear——

The Court: Then how can he compare——

Mr. Sellers: Your Honor, must the man be standing beside a truck in order to have knowledge of this sort of thing? I respectfully contend the man can be an expert in the field without having stood beside the truck at the time it occurred. You may be right. Maybe he doesn't have that information, but I think we are entitled to find out, and I know your Honor will permit me to ask what other basis he has.

The Court: Go ahead, if you can qualify him. I am willing for you to qualify him.

Mr. Sellers: Thank you, your Honor.

Q. Do you have any other basis, Mr. Tilden, for the formation of an opinion relative to the action of balling up in trucks and the relevancy of the type of mix received in that connection?

(Testimony of Carl W. Tilden.)

A. Yes, I believe I have.

Q. Well, will you please explain that to the court so that we can judge whether or not you are qualified to voice an opinion on the matter? [249]

A. I have 54 distributors throughout the country. These 54 distributors have an awfully nasty habit of contacting me direct when things go wrong. Cement balling is what they consider something as gone wrong. It is not normal.

Also, I have three field service men who work directly for me, whom I dispatch to these various jobs to see if we can't help in some way to correct their problem.

Q. What information have you gained through those sources which gave you information on this point?

Mr. Lyon: Your Honor, I will object to this as based upon hearsay. He is just repeating now what somebody else has told him.

The Court: Can you qualify an expert witness on hearsay?

Mr. Sellers: I am not qualifying him as an expert, your Honor. This gentleman is the sales manager——

The Court: Yes, you are. You are trying to get him to testify that balling up occurs less frequently from a Johnson type installation than the other.

Mr. Sellers: I am not asking for his opinion, your Honor. If he were an expert, I would ask for his opinion on a particular point. I am asking him what his experience has been.

(Testimony of Carl W. Tilden.)

The Court: He has had two experiences.

Mr. Sellers: Oh, no, no, your Honor. I can't agree to that.

The Court: Can you qualify a man on hearsay, anything [250] that he has got from his——

Mr. Sellers: These are figures and facts that are his business experience in his every-day business, your Honor. Do you mean to say the president of a company who is running the entire company, and he knows what that company does, he is not down on the job digging the coal, does not know the over-all picture of the company?

Now, this man, these reports come in to him day by day. He knows what the problems are and he corrects the difficulties. He handles the problems. It seems to me we are entitled to his information, at least, if not his personal information, at least what the experience of his company is.

Now, let's not put it in terms of an expert, but what is the experience of his company in this field. Certainly he can tell that. If he can't, who can? The man down on the job can't tell. Here is the man who is the sales manager of his company. He receives these reports from the field that they have balling up problems, and he investigates the troubles and it develops that the Johnson type plant gives less trouble.

The Court: If he has the reports, aren't the reports the best evidence?

Mr. Sellers: There has been no objection on that point, your Honor.

(Testimony of Carl W. Tilden.)

Mr. Lyon: There will be.

Mr. Sellers: Well, there hasn't been, your Honor. There [251] has been no objection on best evidence, no objection at all. I think that I am entitled to show that this man in his daily experiences, telephone calls, possibly, so he knows what happens in his company. To say we must reduce it to personal terms——

The Court: But there hasn't been any testimony yet that these complaints are based on the question of whether or not it is a type of plant where the concrete is put into the mixing hopper in the center or comes from the side.

Mr. Sellers: I haven't been able to do that yet.

The Court: All he says so far is that he has had these reports.

Mr. Sellers: Yes, he has.

The Court: Let's find out. Let's see if we can't lay some foundation to get the testimony admitted.

Mr. Sellers: I would like to, your Honor, but this gentleman is the sales manager of the company. His experience is based on the experience as sales manager. In comes a report from the field that they have balling up.

The Court: Let him tell about these reports.

Mr. Sellers: I am trying to do that.

The Court: Where did they come from and what kind of equipment was involved?

Mr. Sellers: I did ask that, your Honor. You remember I asked if his experience was based on anything besides the two standing beside the truck

(Testimony of Carl W. Tilden.)

episodes, and he said yes, that [252] he had these 53 or 54 distributors and three specialists, and all those come in to him. Now, I will follow your Honor's suggestion.

Q. Would you please detail some of these experiences which you have had?

The Court: No. Wait a minute. Not the experiences he has had, because he has testified to what he has had.

Mr. Sellers: I beg your pardon.

The Court: The experience has been called to your attention now.

The Witness: The experiences that have been called to my attention are by and large based on when we first entered this business, and we have been in the field about seven or eight years building these truck mixers. On our first entry into the business, our distributors were quite unfamiliar with the problem of selling and servicing and making these things operate. The people that bought our product were unfamiliar with it, and during that period we had a great many calls to say, "Come on out here and show me how to make this thing operate."

The Court: Just a minute.

The Witness: That happened quite a while ago, Judge.

The Court: Just a minute. When you say "make this thing operate," what are you talking about? Is it your truck or the batching plant? [253]

(Testimony of Carl W. Tilden.)

The Witness: He is calling us because he wants us to make our truck operate.

The Court: The truck operate, all right.

The Witness: Yes, the truck, not the plant, because we don't have anything to do with it. My experience gained and my knowledge, my down-to-earth knowledge on this was gained through this, I would call it difficult period for us, during our entry into this business.

As we learned, so did the people that operated our machines and so did the people that sold them and so did the people that serviced them.

In the last two years or so, a lot of problems might arise in the field where our distributors would automatically take care of them so that we as the manufacturer would not learn of them and, therefore, our experience in the last year to a year and a half has not been as broad and as varied as it was prior to that time, and for me to be quite specific, your Honor, on a date and a time and when a certain thing happened, and under what conditions it happened, I couldn't produce any evidence right with me today. I didn't bring it.

The Court: Let me ask you this. You say that this was when you first started out about six or seven years ago, is that correct?

The Witness: Actually, we produced our first mixer eight years ago. [254]

The Court: All right. I presume this is a local organization?

The Witness: Yes, sir.

(Testimony of Carl W. Tilden.)

The Court: And I presume you started selling locally?

The Witness: Yes, sir.

The Court: These calls came in, I presume, locally?

The Witness: Yes, sir.

The Court: That is, in the first year or so, you didn't have nationwide distribution?

The Witness: That's right.

The Court: You had local distribution?

The Witness: Yes.

The Court: All right. Now, during this period, how many Johnson batch plants were there in Los Angeles County or in Southern California?

The Witness: I have no idea.

The Court: Do you know whether or not you were called out on a complaint, and you diagnosed the problem because the cement was not being placed in the center rather than from the side?

The Witness: I believe my point is that all my experience is that we can sometimes mix it faster out of one plant than we can out of another. That is our experience as far as truck mixer operation.

The Court: Why do you say you can mix it faster? Is it [255] because of the quality of the materials, the question of the amount of water in the materials, or is it a question of the way it is mixed?

The Witness: It is my theory, because of the fact that there is a very definite difference between mixing from—batching out of one type plant and

(Testimony of Carl W. Tilden.)

another, that it must be in the batching of the batch plant that helps the truck mixer to do its job.

The Court: That is just a theory, isn't it?

The Witness: No. It is proven. I mean one plant to us will allow the truck mixer to mix faster than another type, because possibly the materials are intermingled before they enter the drum.

The Court: Suppose I took one of your mixing trucks and manually put in the materials. I put in the rock and the sand, and on top of that I put in cement and put in the proper amount of water.

The Witness: Yes.

The Court: Wouldn't your revolving drum truck adequately mix that?

The Witness: It would mix it, but it would mix it much faster if you put in a shovelful of sand, a shovelful of aggregate, and a shovelful of cement, and a little water in between, because you are sandwiching all that material in there, and it would mix it much faster that way than [256] individually.

The Court: Forgetting the period of time, it would mix it adequately, wouldn't it?

The Witness: It would mix it if you took long enough, yes, sir.

The Court: So the only question here is time?

The Witness: Yes.

Mr. Sellers: That is one point, your Honor.

Mr. Lyon: May I move to strike the last two answers of this gentleman? There is no proof in this record whatsoever that he has ever run a mix-

(Testimony of Carl W. Tilden.)

ing plant, a batching plant, or ever been present at a time when this was put in one of these machines.

The Court: Well, I think it is up to the court to weigh the evidence. A witness' expert testimony is no more valuable than the foundation that he lays.

Mr. Sellers: Well, if I may say so, your Honor, I am not attempting to qualify this gentleman as an expert in the field of batching equipment, but instead he has practical and fact experience in the field of trucks and in the selling of trucks and the problems that a manufacturer of trucks runs into, and I don't want to qualify him as an expert. I am asking him questions concerning what experience he has had in the matter of time taken, in treating a mix from one type of plant and another, and in the question of balling up. I think [257] that he can give his experiences and what conclusions he draws from those experiences, not as an expert but——

The Court: I have overruled the objection and you have got your statement in the record. Now, suppose you proceed.

Mr. Sellers: Thank you, your Honor. Now I have lost my place.

The Court: Well, maybe we ought to take the afternoon recess. It's nearly 3:00 o'clock.

Mr. Sellers: Thank you, your Honor. I would like that.

The Court: Recess until five minutes after 3:00.

(Recess.)

(Testimony of Carl W. Tilden.)

The Court: You may proceed.

Q. (By Mr. Sellers): Did I understand you properly to say, Mr. Tilden, that your experience upon which you base your statements of what has happened, those experiences were acquired largely prior to the last several years?

A. Yes, sir.

Q. And by virtue of the growth of your business and the greater efficiency of your field people, most of these problems no longer come into your central main office, but instead are handled out in the field?

A. Yes, sir.

Q. Does that explain in part why you are not able at this time to pinpoint these particular difficulties in terms of the plant where this problem arose and that problem arose? [258]

A. Yes, sir.

Q. But from your general experience dating back to the time when these problems did come into your plant, was it your experience that you received fewer complaints as to balling up in your trucks where the mix had been received from plants of the Johnson type, if you know?

Mr. Lyon: I will object to that question, your Honor. This gentleman is supposedly a fact witness. I would like the testimony to be confined to his own personal experience. He is asked in this question to testify to things that were told him and not things that he learned from his own personal experience.

The Court: Overruled.

(Testimony of Carl W. Tilden.)

Mr. Sellers: Thank you.

The Witness: Yes.

Mr. Sellers: Will you please read the question?

The Court: You have got a "yes" answer.

Mr. Sellers: Then let it go.

Q. Can you at this time remember even a few of those instances which support that statement?

A. Well, one particular case that I recall was on a job where the specifications were quite rigid. The batch plant was located on the job site, and the haul was quite short. They were quite interested in meeting a minimum mixing period required in the specifications, but were having [259] difficulty achieving the proper mix within the minimum specifications. In other words, they were held at that particular time to a minimum of 40 revolutions on the drum, at which time they could discharge the load according to the specifications, but when they discharged the load, they found it was not a proper mix and they would have to continue mixing to get the mix. At this particular job, we went down and instructed the drivers on——

The Court: Where was the job?

The Witness: The job was in Kansas on an air base. It was quite a large contract. We went down and instructed the drivers properly on how to operate their mixers at the proper speed to get the best mixing action from our mixer.

Also we went through our regular routine on a matter of this type of watching the batching procedures and making recommendations on when the

(Testimony of Carl W. Tilden.)

water and cement and so forth, should be induced, and were able to improve their operation, but not to the satisfaction of the inspectors within the minimum requirement.

This condition existed, I believe, for almost six months or so, and later our district manager in the territory——

The Court: Just a minute. Did you go down on the job?

The Witness: No, sir.

The Court: All you know is what somebody told you? [260]

The Witness: That's right. These are from field reports and correspondence from our people at the scene.

Mr. Lyon: I move that the answer be stricken as based on hearsay.

The Court: You know, it is purely hearsay. I don't know how you can avoid the hearsay rule as to what somebody told him. Here is a job over in Kansas. Somebody told him so-and-so.

Mr. Sellers: Your Honor, I recognize the problem we have here and the hearsay rule is certainly a stumbling block we have to overcome. On the other hand, I ask your Honor where would you go to get the over-all picture but in the head office?

The Court: If he had records, if you had reports, you might be able to get the reports in.

Mr. Sellers: But just a minute, you wouldn't be able to identify those. Reports would not be——

(Testimony of Carl W. Tilden.)

The Court: You can get them in under the rules of the court. If you have got your records kept in the ordinary course of business, although they are hearsay, they can be gotten in.

Mr. Sellers: This information that the witness has received was received in the regular course of business. Do I understand only information which is written, received in the regular course of business, is admissible? This is information which he received in the regular course of business. [261]

The Court: The rule doesn't provide for the admission of evidence other than written evidence received in the regular course of business. Any memorandum or record——

Mr. Sellers: I will accept your Honor's statement, but with all due respect, it would seem to me that the experiences which he has encountered in the regular performance of his duties——

The Court: Well, I might call your attention to Section 1732 of the Code.

“Any writing or record, whether in the form of entries in a book or otherwise, made as a memorandum or record of any act, transaction, occurrence or event shall be admissible if made in the regular course of any business, and it was the regular course of such business to make such memorandum or record at the time of such act or transaction.”

It doesn't say any oral statements made. It is any record made.

(Testimony of Carl W. Tilden.)

Mr. Sellers: I should have had the Code and read it more thoroughly. That section doesn't help me. But I would look for another section. Very frankly, it seems not right that we should not be able to establish the experience of this man in his business. I don't ask that any particular instance to which he refers be verified, but I ask merely for the sum total of his various experiences. [262]

The Court: As far as I know, this might be a Johnson plant down there. I don't know what kind of a plant it was. He has never testified. I don't know whether he knows what type of plant it was.

Mr. Sellers: Well, let's ask him if he knows and how he knows and then we will have something to base it on.

The Court: Do you know what kind of a batching plant it was?

The Witness: It was a two-stop plant. They received the cement and the aggregate at different stations.

The Court: We have a one-stop plant here under consideration, and not a two-stop plant.

Q. (By Mr. Sellers): Let me ask you, Mr. Tilden, do you in your business keep any records which would relate and record the complaints of the type concerning which we have been inquiring about here which we might produce to satisfy his Honor?

A. We have records of correspondence where people have written in describing their trouble, yes, sir.

(Testimony of Carl W. Tilden.)

Q. Could they be made available? Would we have time to inspect those and the opportunity to inspect those or obtain those?

A. They could be made available, yes, sir.

Mr. Sellers: Your Honor, this witness only came to my office this morning for the first time and I would request that—— [263]

The Court: This case will go for a couple of more days. You can go down and make an inspection and see if you can find anything of importance.

Mr. Sellers: Then, your Honor, with that I would like to request that I be permitted to continue this witness' testimony until we have had the opportunity to do that.

The Court: Well, just leave that phase of the testimony open. I will allow you to recall the witness here if you can find any record or memorandum of these matters, but let's complete the other part of his testimony and also the cross-examination.

Mr. Sellers: All right, your Honor.

The Witness: I didn't finish my answer the last time.

Mr. Sellers: May he finish his answer, your Honor?

The Court: Yes, go ahead.

The Witness: You see, I mentioned that our field manager had visited the job location six months after we were down there to help correct their problems, and at that time they had installed a central flow plant and were meeting the specifications.

(Testimony of Carl W. Tilden.)

Mr. Lyon: May I move that that be stricken, your Honor, as based on hearsay?

The Witness: I wanted to finish.

The Court: The latter part may go out.

Mr. Sellers: The only valuable part may [264] go out.

Q. Do you have, Mr. Tilden, any record of those facts which we might find?

A. I think we can find it in our correspondence.

Mr. Sellers: Thank you, your Honor, for your help.

Q. Can you refer to any particular experiences in which you found it necessary to incorporate more expensive construction into your mix trucks by virtue of the fact that the mix plant was not giving you an adequate mix?

Mr. Lyon: Your Honor, may I object to the form of the question as not directed to his personal knowledge?

Mr. Sellers: I will limit it to his personal knowledge. I asked him if he could remember, I think, but we will limit it to his personal knowledge.

The Witness: Yes. In the case of cement balls we discussed a little earlier, in the case of cement balls where they persisted in the mix after we had covered most all of the other operational directions that we would normally suggest, where it was severe, we have installed in the mixers additional mixing fins of various designs to eliminate the balls in the mixer.

(Testimony of Carl W. Tilden.)

Q. Can you identify that particular plant to which you have referred?

A. On the addition of the fins, and so forth?

Q. Yes.

A. This particular plant was, I believe, a home-made [265] plant. In other words, there was no way of identifying it because several of these plants don't have their identification tags, and so forth, on them, but by type it was a side entry plant.

Q. Can you give us another illustration of a case in which you found it necessary to provide more complicated or expensive additions to the mix truck in order to handle the product of the batching plant?

A. A similar nature, in Las Vegas, was another one where we had a similar requirement that we made additions to the machine in order to break the balls up.

Q. Does the name Teichert and Son refresh your recollection?

A. Teichert and Son is the one I was talking about first.

Mr. Lyon: How do you spell it?

The Witness: It is Teichert and Son—I don't just exactly know.

Mr. Denny: It is T-e-i-c-h-e-r-t.

Q. (By Mr. Sellers): Would there be another example that you can recall?

A. An example would be Las Vegas Building Materials in Las Vegas, Nevada.

(Testimony of Carl W. Tilden.)

Q. Was there a San Gabriel Ready-Mix, a plant by that name? [266]

A. San Gabriel Ready-Mix, also, out here in the San Fernando Valley, we had to make the same additions to their machine.

Q. Can you state of your own knowledge whether any of those plants that did not give adequate mix and which required additional structure in your trucks, were any of those of the central feed Johnson type?

A. Not to my knowledge.

The Court: Did you see any of those plants?

The Witness: Yes, I saw the two here locally. I did not see the one in Las Vegas.

Mr. Sellers: I would like to ask this question, your Honor. Of course, it may be objected to.

Q. Can you state from your experience based upon the written records which we hope to be able to introduce tomorrow whether or not there have been any fewer complaints as to balling up from the batch plant owners of the Johnson type than from batch plant owners of other types of plants, based on your written records you have received?

The Court: You better save that question.

Mr. Sellers: I thought so, your Honor, but that is why I would rather not relinquish my direct.

The Court: Well, you can recall this witness on direct if you can find any records.

Mr. Sellers: All right, your Honor. On that understanding, then, I would like to submit him to cross-examination at [267] this time.

The Court: All right.

(Testimony of Carl W. Tilden.)

Cross-Examination

By Mr. Lyon:

Q. Mr. Tilden, are you familiar with the Nellis Air Base job in Las Vegas?

A. I am familiar with it, yes.

Q. Did trucks from your company participate in that job? A. Yes, sir.

Q. Were there any complaints as to the job that they were doing at that time? In other words, was the cement being properly mixed, the concrete being properly mixed, or not? Did you ever have any complaints from that job?

A. By memory again, the only complaint I can recall on that particular job was the rate of discharge.

Q. Did your organization find it necessary to replace the blades in your mixer trucks in order to comply with the specifications on that job?

A. No, we did not replace the blades.

Q. Are your trucks using the same blades that they used six years ago? A. No.

Q. You change your blades all the time, is that correct? [268] A. Not all of the time.

Q. Well, frequently.

A. Not frequently, no.

Q. How often do you change the blades of these mixers?

A. We have made four basic model changes.

Q. Why were those changes made?

A. To improve the ability of the machine to do its job.

(Testimony of Carl W. Tilden.)

Q. To avoid balling up?

A. Not specifically, no.

Q. Have you ever had a complaint that your mixer resulted in a balled-up job of batching, in mixing concrete?

A. Yes, definitely.

Q. Was that complaint ever found to be based on the fact that the blades in your truck weren't doing the job properly, or some other part of your mixer was not doing the job properly?

A. No, sir, not when we pointed out it was happening to all other makes at the same time.

Q. In a mixer of your type, what is the life expectancy of the blades?

A. It depends entirely on the use of the unit.

Q. Say it is under constant use on a large project.

A. What slump aggregate and the abrasiveness of the aggregate is the factor? In other words, there are so many variable factors it is not possible for anyone to say it is [269] going to be a certain length of time.

Q. It is necessary, however, to replace these blades from time to time in your trucking equipment?

A. Yes. It is a normal type of operation as far as maintenance.

Q. If the blades become too worn, what is the result?

A. Obviously, if the blades become worn to a point, a certain point, it is going to affect the mixer's ability to do its work.

(Testimony of Carl W. Tilden.)

Q. And what will be the result of its not being able to do its work?

A. To mix and discharge concrete.

Q. Will you obtain balling up in such a mixer?

A. You could.

Q. Are you familiar with the Noble type of plant?

A. Yes.

Q. Is that a concentric discharge type of plant?

A. Concentric? Do you mean is it central flow?

Q. Central flow type, if you prefer that expression.

A. I would classify it as not, but close.

Q. Wherein does it differ from a central flow type of device? Perhaps I can help you.

A. If you could refresh my memory, it would be a big help.

Q. Have you seen this particular type of Noble construction? [270]

A. In the field?

Q. Anywhere.

A. I have seen it in this book, but I haven't seen this specifically myself, no.

Q. You never have?

A. No.

Q. Have you seen very many types of batchers, Mr. Tilden?

A. I would say a majority of all types of batchers I have seen.

Q. But you haven't seen that Noble batcher?

A. Not that specific one.

Q. What type Noble batchers have you seen?

A. The side entry Nobles by and large have been my experience with Noble.

Q. I believe you testified on your direct exami-

(Testimony of Carl W. Tilden.)

nation that you had some kind of trouble in Las Vegas yesterday, or was it Kansas City?

A. It was Kansas City yesterday. I don't know what it is today.

Q. You don't know what it is?

A. It is mixing time.

Q. It is mixing time. In other words, it is the fault of your particular operator on your truck not doing it right, [271] or the equipment is not in good shape, or something of that nature? Is that the usual type of complaint you get?

A. Not the usual type of complaint, no.

Q. Let me ask you this. Is it just as possible when you get one of these complaints that the operator isn't running his truck correctly as it is some other source?

A. Very possible.

Q. Another possibility is that the truck itself has some defect in it, it is either too worn or something?

A. Not the truck. The mixer.

Q. The mixer. Pardon me. Is your organization the largest maker of truck mixers in the country, or do you have major competition?

A. We sure do have some major competitors, yes, sir.

Q. How would you rank yourself, say, with the top two or three?

A. No. 1.

Q. You think you are the top?

A. Yes.

Q. Are you much larger than the next competitor or very close?

A. It is a close race.

Q. How many of these competitors of substantially your size are there in the field?

(Testimony of Carl W. Tilden.)

A. Let's say there are three competitors besides ourselves. [272]

Q. And you sell closely the same number of truck mixers that your competitors do?

A. Yes.

Mr. Lyon: That's all.

Mr. Sellers: I would like to call the witness tomorrow, if we may.

The Court: All right. You may call him back in the morning.

Mr. Sellers: Thank you, your Honor.

The Court: If he can find any records, he can bring his records here and we will discuss them. You may step down.

(Witness withdrawn.)

Mr. Sellers: I would like at this time to call Mr. Pine as a witness.

ROGER PINE

called as a witness by and on behalf of the plaintiff herein, having been first duly sworn, was examined and testified as follows:

The Clerk: Will you state your name, please?

The Witness: Roger Pine.

The Clerk: How do you spell your last name?

The Witness: P-i-n-e. [273]

Direct Examination

By Mr. Sellers:

(Testimony of Roger Pine.)

Q. Will you please state your occupation, Mr. Pine?

A. I am a draftsman, patent draftsman.

Q. Where is your place of business?

A. Los Angeles.

Q. In your work do you make patent drawings?

A. Yes, we do.

Q. Do you also make drawings for use as exhibits in court cases?

A. That is correct.

Mr. Lyon: If the Court please, I will stipulate Mr. Pine does this type of work. He has done it for me.

The Court: Is this just a foundation for these drawings?

Mr. Sellers: That's all, your Honor.

The Court: Won't you stipulate that?

Mr. Lyon: I will stipulate that the drawings were made by Mr. Pine. There is a question in my mind whether they fully disclose the plant, your Honor. I don't claim there is anything incorrect in them. I just don't think they are complete.

The Court: All right.

Q. (By Mr. Sellers): Did you last summer, I believe it was, Mr. Pine, go to the Stanton plant at Stanton, California, and make measurements and photographs of the Stanton batching [274] plant?

A. Yes, that is correct.

Q. Did you do that for the purpose of making certain drawings in this case involved here?

A. Yes.

(Testimony of Roger Pine.)

The Court: May I ask Mr. Lyon a question? Do you raise any question about the drawings of the Stanton plant, that they are not correct drawings?

Mr. Lyon: There is only one question, your Honor. The drawings do not show the nature of the discharge of the aggregate hopper. Now, I can clarify that with Mr. Pine in a matter of one question.

Mr. Sellers: Well, if you have only one question——

Mr. Lyon: That is the only objection I have and I will clarify that.

The Court: The only purpose is to get these in.

Mr. Sellers: That's all.

The Court: Suppose you let Mr. Lyon ask the question and get them in evidence.

Mr. Sellers: They are in evidence, your Honor, but I want them clearly substantiated. Just ask your question, Mr. Lyon.

The Court: That is Exhibit 18, isn't it? [275]

Cross-Examination

By Mr. Lyon:

Q. Referring to Exhibit 18, what is the shape of the discharge from the aggregate hopper, square, circular, or oval? A. It is rectangular.

Q. Rectangular?

A. It is rectangular except for the additions, the continuation of the baffles, which come down to cover. It is basically rectangular.

(Testimony of Roger Pine.)

Q. This outlet at this point?

A. That opening there is rectangular.

The Court: May I ask a question relative to Section 33. You can look at that there. I assume that the aggregates are in these two right angles. Is that just vacant air there? Does that contain anything?

The Witness: That is vacant space. It contains the weighing hopper for the cement. If you will notice the section indication 33 on this view here, it is taken below the cement hoppers, so that has been eliminated in this view, so that all that we show down here is the discharge nozzle for the cement.

The Court: Then the aggregate is not all the way around the cement hopper?

Mr. Sellers: Would this help any, your Honor, to refer to Exhibit 14? He also made this [276] drawing.

The Witness: Yes, that is correct. We have these two baffle plates which divide the main weighing hopper, the aggregate weighing hopper, into three separate spaces. The central space contains the cement weighing hopper, which is shown here and here.

Now, the baffle plates or dividers are spaced from the bottom, or the opening of the main weighing hopper, the aggregate weighing hopper, so that the aggregate comprising sand and gravel will seep down underneath and cover this area here as shown in this sectional view 33 here.

Mr. Sellers: Of Exhibit 14.

(Testimony of Roger Pine.)

The Court: Then you would see that the aggregate is all the way around the circle that indicates the cement?

The Witness: Well, it is actually below it, as more clearly shown here (indicating).

Q. (By Mr. Lyon): At this point here it does not surround it, is that correct? A. No.

Q. At this point, at the point of discharge of the cement hopper, it is not surrounding it, is that correct?

A. No, not as I understand your question.

Mr. Lyon: There is only one further question, your Honor, if you are through.

The Court: I am through. All right.

Q. (By Mr. Lyon): Did you notice the shape of the discharge [277] from the cement hopper? Was it oblong or oval or was it circular, or do you recall?

A. No. I only had—I couldn't get down inside there and see it.

Q. You couldn't get inside to see it?

A. No.

Mr. Lyon: That's all I want to know.

The Court: Do you have any objection?

Mr. Lyon: The shape of that is different. It is not circular. We will establish that. I have no other objection to the drawings.

Mr. Sellers: You are referring to the lower end of the cement hopper?

Mr. Lyon: The lower end of the cement hopper has an oval opening 12 by 24.

(Testimony of Roger Pine.)

Mr. Sellers: Oval rather than circular?

Mr. Lyon: Right.

Mr. Sellers: That is the only difference?

Mr. Lyon: It makes quite a difference, but I will prove that in time.

Mr. Sellers: That is all we have, your Honor. Thank you very much.

The Court: All right. Now you can put your drawings into evidence.

Mr. Sellers: They are in evidence, your Honor, but there [278] might have been some objections later.

The Court: All right.

(Witness excused.)

Mr. Sellers: Your Honor, my next witness will be Mr. Stromberg, the defendant.

The Court: We have got 20 minutes. Let's put him on the stand.

Mr. Sellers: Very good.

MERLE W. STROMBERG

the defendant herein, called as a witness by the plaintiff, having been first duly sworn, was examined and testified as follows:

The Clerk: State your name, sir.

The Witness: Merle W. Stromberg.

(Testimony of Merle W. Stromberg.)

Direct Examination

By Mr. Sellers:

Q. What is your business, Mr. Stromberg?

A. Steel manufacturer of various types, including ready-mix plants and batching equipment.

Q. Wouldn't steel fabrication really be more accurate? You don't manufacture steel itself? You are a steel fabricator?

A. A steel fabricator in various other items besides [279] ready-mix plants.

Q. And you do build concrete batching plants?

A. Yes.

Q. Mr. Stromberg, I show you Plaintiff's Exhibit No. 1 and ask if this is a drawing which you have prepared? A. Yes.

Q. To what does it relate, please?

A. It relates to an aggregate hopper with partitions and a cement hopper in between.

Q. The cement hopper is partitioned between the aggregate hopper? A. That's right.

Q. Is this a valve we find down at the lower end of the cement hopper?

A. That is a butterfly valve.

Q. Looking at the lower left-hand figure, what do we see down here? Will you please explain that to the court?

A. That is a top view of both hoppers and the partitions.

Q. We find a hopper on the left and a hopper on the right, and then do we find the cement hopper in between the two? A. That is correct.

(Testimony of Merle W. Stromberg.)

Q. Do we find hooks extending up from the cement hopper by which the cement hopper can be independently weighed? [280]

A. That is an indication of where the scales are hooked on.

Q. We don't see any means to connect the beams or scale to the outer hopper, but would such means be provided for the outer hopper?

A. We do see those.

Q. The brackets we see are——

A. That is correct.

Q. All right. To what did this particular drawing relate, Mr. Stromberg?

A. I believe this drawing relates to a typical hopper that we have manufactured. It possibly could be used in one or more plants.

Q. Does it accurately show the relationship of the hoppers at the Stanton plant in Stanton, California?

A. It gives a general idea of the Stanton hoppers.

Q. Who made that drawing, the original of that drawing?

A. The original drawing—this drawing was drawn by Mr. Cover.

The Court: Who is Mr. Cover?

The Witness: He was an engineer for me at that time.

Q. (By Mr. Sellers): It was drawn by one of your employees?

A. That is correct.

(Testimony of Merle W. Stromberg.)

Q. And whose idea was it? Whose design was this? [281]

A. I told him what I wanted and from there he gave me the necessary dimensions across the face and the overall height that I would have to have before it could go to the shop for fabrication.

The Court: When did you tell him that? When did this all occur, do you know? Can you tell by the drawings when it occurred?

The Witness: The exact month, no. This was a little over a year ago.

The Court: A year ago?

The Witness: Yes.

Q. (By Mr. Sellers): This drawing was made over a year ago, the original was made over a year ago? A. Yes.

Q. Is this the first drawing of this type you remember made showing this type of construction?

A. The original drawing or the master drawing could have been made as long as four years ago.

Q. How do you place that time?

A. The first hopper that I built or had anything to do with was in 1950.

Q. In connection with what plant did you make that drawing?

A. The Gardena plant of Mr. Pearman.

Q. That was the first plant of this type that you built? [282] A. That is correct.

Q. Did you and Mr. Pearman work out together the details of this type of construction, or where did you get the design?

(Testimony of Merle W. Stromberg.)

A. I was told what he wanted and I drew it from there.

Q. You had never built a batching plant prior to that time? A. I had not.

Q. That was your first batching plant?

A. It was.

Q. Had you ever inspected a batching plant prior to that time?

A. I have been in the industry for 25 years.

Q. Please answer my question. A. Yes.

Q. You had, so that you were familiar with batching plants of different designs? A. Yes.

Q. Were you familiar with the batching plants of the central hopper type, central cement hopper type? A. No.

Q. You mean you had been in the batching plant business for 20 years and had never seen that type of plant? A. That is correct.

Q. Where were you in that business? [283]

A. I have followed dam construction from the time Boulder started until I went into the service, and that is an entirely different type of plant than what we have. All the hoppers are entirely different than what we are talking about here.

Q. You mean in those large operations?

A. That is correct.

Q. Mr. Stromberg, please——

The Court: May I ask you a question? Who told you about putting the cement hopper in the center? Where did you get that idea?

(Testimony of Merle W. Stromberg.)

The Witness: It was advocated that the customer wanted his hopper confined on account of space, and the idea was conceived that the center compartment or central location would be a logical point.

The Court: Who conceived it? Did you or Mr. Pearman?

The Witness: I was told by Mr. Pearman that he wanted his hopper in the center.

The Court: He was the one that told you that?

The Witness: I have seen the Noble construction which it has a hopper in the center, but only suspended on one scale. He wanted to have his center hopper, which is a center—the cement compartment, weighed on a separate scale due to the fact that he wanted to conserve the cement.

The Court: And he is the one who had the idea? It was [284] not your idea?

The Witness: That is correct.

Q. (By Mr. Sellers): Did I understand you to say he wanted to conserve the cement?

A. He wanted to conserve cement.

Q. What do you mean by that?

A. By weighing it on a separate scale, your graduations on a cement scale will be as a normal rule in three-pound graduations instead of 20-pound graduations.

Q. It made possible more accurate weighing?

A. Yes.

Q. And in part made possible conservation of cement?

A. Yes.

(Testimony of Merle W. Stromberg.)

Q. Just to clarify my understanding, you had been in this business for 20 years, and at the time you designed this first plant at Mr. Pearman's request, you had never seen a plant of that type?

A. Not a hopper within a hopper.

Q. Nor a plant in which a hopper within a hopper has independent weighing means for the inner hopper?

A. I had not.

The Court: May I ask a question?

This cement hopper within a hopper with an independent weighing mechanism, did the question of putting that upon a scale or in a weighing mechanism present quite an engineering [285] problem?

The Witness: No, it is not.

The Court: Not quite an engineering problem?

The Witness: No, definitely not. It merely means that there are two partitions added to the hopper to divide it so that the cement compartment will hang freely.

The Court: Was it any more difficult to put the cement hopper on a weighing apparatus than it was the other two hoppers, the aggregate hoppers?

The Witness: No.

The Court: So the fact that he wanted a separate weighing apparatus for the cement hopper didn't present any particular problem, is that right?

The Witness: As far as I am concerned, no, sir.

The Court: I thought that would be a problem.

Q. (By Mr. Sellers): I believe you said that he gave you the idea, Mr. Stromberg. Mr. Pearman gave you the idea, so it didn't present a problem to

(Testimony of Merle W. Stromberg.)

you. If it presented a problem to anyone, he had already invented it, is that correct?

A. He did not invent it, as I understand it now.

Q. But as far as you were concerned at that time, he had conceived of that arrangement and he told you about it?

The Court: Mr. Pearman, I don't think ever testified he claimed an invention. He said he developed the idea.

Mr. Sellers: Yes. I used the wrong word, your Honor. I [286] mean as far as Mr. Stromberg is concerned, Mr. Pearman took the idea to him and it was novel to Mr. Pearman. As far as I know, Mr. Pearman doesn't claim to be an inventor either.

The Court: All right.

Q. (By Mr. Sellers): So it is a fact that in this construction we have the cement hopper positioned within the sections of the aggregate hopper and the two hoppers independently weighable, and the cement hopper discharging down through the discharge of the aggregate hopper? A. Yes.

Q. Is that discharge of the cement hopper positioned separately with respect to the discharge of the aggregate hopper?

A. Yes. It is directly above the hopper.

Q. And the discharge itself, when they go down through, isn't that the shaft of cement centrally positioned with respect to the shaft of aggregate?

A. The bottom gate on the aggregate hopper is oblong. The butterfly gate is round.

(Testimony of Merle W. Stromberg.)

Q. I will put it this way. Is not the axis of the cement hopper positioned coaxially with the axis of the aggregate hopper? Are they not the same axis? You understand my language?

Mr. Lyon: I want to be certain he understands what you mean by coaxially. Those are patent attorney terms. [287]

The Court: I might not understand either.

Mr. Sellers: I am sorry, your Honor.

Q. What I want to determine is whether or not if you have the dimensions of your outlet of your aggregate hopper, whether or not a point right in the center of that discharge would not also be the same point, possibly displaced vertically, as the point which is directly in the center of your cement hopper.

A. The center of this opening, which would be here, is directly in the center of the butterfly valve.

Q. Directly below it. That answers my question. Thank you.

Mr. Sellers: I would like to offer in evidence Exhibit No. 6, your Honor.

The Court: It may be received in evidence.

The Clerk: It was received yesterday.

Mr. Lyon: 1, 5 and 8 are in.

Mr. Sellers: I would rather offer them twice than not at all, your Honor.

Q. Mr. Stromberg, I show you a photograph and ask you if you can identify this, what it shows.

The Court: Identify it from the front, not the back.

(Testimony of Merle W. Stromberg.)

The Witness: I am looking at the date.

Q. (By Mr. Sellers): I had in mind the front, Mr. Stromberg. [288]

A. Yes, I can identify it. That is Mr. Pearman's plant in Gardena.

Q. Who took that photograph?

A. I did. I had it taken, I should say.

Mr. Sellers: I would like to offer in evidence Exhibit No. 2.

The Court: It may be received in evidence.

The Clerk: Exhibit 2.

(The exhibit referred to was received in evidence and marked as Plaintiff's Exhibit No. 2.)

Q. (By Mr. Sellers): I now show you a photograph which has been marked for identification Plaintiff's Exhibit 3 and ask you if you can identify that? A. Yes.

Q. From the front?

A. Yes. I still look at the back.

Q. What is it, please?

A. That is Jones Concrete in Santa Monica.

Q. Did you have anything to do with Jones Concrete in Santa Monica? A. I built this plant.

Q. Did you provide that photograph to this attorney, to the speaker? A. Yes.

Q. Does that plant include a centrally positioned cement [289] hopper between sections of an aggregate hopper with independent weighing means?

A. Yes.

(Testimony of Merle W. Stromberg.)

Mr. Sellers: I offer into evidence as Plaintiff's Exhibit No. 3 the photograph the witness has identified.

The Court: It may be received in evidence.

The Clerk: Exhibit 3.

(The exhibit referred to was received in evidence and marked as Plaintiff's Exhibit No. 3.)

Q. (By Mr. Sellers): Is the plant which you have just referred to, and as shown in the drawing, Plaintiff's Exhibit No. 3, is that plant generally similar to the Stanton plant at Stanton, California?

A. The aggregate bins are identical. The weigh hopper, aggregate weigh hopper, I believe, is a half yard larger, but theoretically it is the same.

Q. Theoretically it is the same? A. Yes.

Q. Thank you. Now, I show you a sheet of yellow——

Mr. Lyon: Pardon me. Can we go a little further than that? There were some other aspects. You asked him if it was identical and I did not receive the answer.

The Court: You can develop that on cross-examination.

Q. (By Mr. Sellers): I show you a drawing which has been marked Plaintiff's Exhibit 4 for identification and ask [290] if you can identify that from the front? A. Yes.

Q. What is it please?

A. At the time this sketch was made by me, I was asked about the receiving hopper at the Stanton plant in Stanton, California.

(Testimony of Merle W. Stromberg.)

Q. Did you make this drawing to evidence the type of construction? A. I did.

Q. Does the drawing show a collector hopper, a doublewall collector hopper, with water coming in at the side and running into that collector hopper?

A. Yes, it does.

Q. And does it show a hopper, aggregate hopper up above the collector hopper which is adapted to discharge down into the collector hopper?

A. Yes.

Q. I don't see, but I ask you, would there be a cement hopper also discharging down into that collector hopper?

A. It would be, because this was taken of the Stanton plant.

Mr. Sellers: I offer into evidence Plaintiff's Exhibit 4, the drawing referred to.

The Court: It may be received in evidence.

The Clerk: Exhibit 4. [291]

(The drawing referred to was received in evidence and marked as Plaintiff's Exhibit No. 4.)

Q. (By Mr. Sellers): I show you a blueprint of a drawing which has been marked for identification as Plaintiff's Exhibit 6 and ask you if you can identify this? A. Yes.

Q. What is it, what does it show, please?

A. It is a plant that we manufactured about three years ago.

Q. What plant is that, please?

(Testimony of Merle W. Stromberg.)

A. I'm sorry. Four years ago. It is now in operation at Lompoc, California.

Q. Was this drawing made for or by you?

A. It was made by me.

Q. Made four years ago? A. Yes.

Q. How does this plant compare in date with the plant which is the Gardena plant?

A. The Gardena plant was manufactured or fabricated in 1950.

Q. This was a later plant, then?

A. Yes. 1952.

Q. I see in the lower right-hand corner the name F. B. Hunter and a figure 2—is that 1952?

A. That is the month of February, 1952. [292]

Q. That would be when this drawing was made, would you say? A. Yes, during that month.

Q. What does this drawing show with particular relationship to the bins and the hoppers?

A. Well, it shows a 500-barrel silo with a transfer screw to the cement weigh hopper, which is weighed independently of the aggregate weigh hopper. The rock elevator, aggregate receiving pit and hopper, cement elevator, and cement unloading screw.

Q. Do we find an aggregate hopper positioned upon both sides of this cement hopper?

A. Aggregate hopper on both sides of the cement.

Q. Did you in this plant provide independent weighing means for the aggregate hopper and for the cement hopper? A. Yes.

(Testimony of Merle W. Stromberg.)

Q. And did the two hoppers, the cement hopper and the aggregate hopper, discharge together down into a collecting bin shown below?

A. They did not discharge together. One discharged ahead of the other.

Q. Wasn't that a matter of how the operator controlled it? Could they not both discharge together? A. Could have been.

Q. It was a matter of election on the part of the [293] operators?

A. It was an election to open both gates at the same time.

Q. That is always true in any plant?

A. Not for proper operation.

Q. Not for proper operation, but it is always possible in any plant, isn't it?

A. It is possible in any plant.

Q. And the cement and the aggregate discharge together down into a collecting hopper down below?

A. Yes.

Q. Did you sell the entire plant to these people who purchased? A. Yes.

Q. You didn't sell just the hoppers or the weighing means, but you sold the entire plant?

A. Yes, and erected the plant, also.

Mr. Sellers: I offer into evidence the exhibit which has been just identified.

The Court: It may be received.

The Clerk: Exhibit 6.

(The exhibit referred to was received in evidence and marked as Plaintiff's Exhibit No. 6.)

(Testimony of Merle W. Stromberg.)

The Court: Now, I notice it is 4:00 o'clock, and as I said yesterday, we like to quit at 4:00 o'clock. After a day [294] in court, I think counsel and also the personnel like to quit promptly.

May I inquire how many more witnesses you have?

Mr. Sellers: Your Honor, I believe this is my last witness unless overnight we have a brainstorm.

The Court: The reason I am asking is that so Mr. Lyon could have notice to proceed tomorrow with his witnesses.

Mr. Sellers: We are working together, your Honor, on a friendly relationship. I believe Mr. Stromberg will be my last witness unless we recall Mr. Tilden.

The Court: There are two attorneys on this case. One of you can go down to this last witness' office and see if you can find any memorandum.

Mr. Sellers: I would like to go, not Mr. Lyon.

The Court: All right. See if you can find any memorandum you think will qualify under the rule.

Mr. Sellers: We will, your Honor. Thank you.

The Court: Court will now stand in recess until 10:00 o'clock tomorrow morning.

(Whereupon, an adjournment was taken to 10:00 o'clock, a.m., Thursday, March 15, [295] 1956.)

Thursday, March 15, 1956—10 A.M.

The Clerk: No, 17,121-HW Civil, C.S. Johnson Company vs. Merle W. Stromberg, et al., further trial.

The Court: Are you ready?

Mr. Sellers: Ready, your Honor.

Mr. Lyon: Yes, your Honor.

The Court: You may proceed.

Mr. Sellers: I should like to offer in evidence, your Honor, as plaintiff's next in order, No. 19, I believe, a manual entitled Concrete Manual, United States Department of the Interior, Bureau of Reclamation. This is the sixth edition, 1955 date, with particular reference to pages 203, 204 and 205, particularly page 204.

I offer this under the provisions of the Federal Code, and particularly Section 1733, which reads as follows:

“Books of records of account or minutes of proceedings of any department or agency of the United States shall be admissible to prove the act, transaction or occurrence, as a memorandum of which the same were made or kept.”

Mr. Lyon: I will object to it, your Honor.

The Court: On what grounds?

Mr. Lyon: I don't think it has any pertinency. I don't see what purpose it is offered for, in the first place, but I [298] don't think this exception covers it.

The Court: Objection overruled. It may be received in evidence.

The Clerk: Exhibit 19.

(The exhibit referred to was received in evidence and marked as Plaintiff's Exhibit No. 19.)

Mr. Lyon: I don't believe that exception covers it.

Mr. Sellers: Mr. Stromberg, please.

MERLE STROMBERG

the defendant herein, having been previously duly sworn, was examined and testified further as follows:

Direct Examination

By Mr. Sellers:

Q. Mr. Stromberg, you are the defendant in this action, aren't you? A. Yes.

Q. You appreciate the fact that I have a right to cross-examine you as an adverse party?

A. Yes.

Q. You know I have the right to lead you and to lead you into questions, and that you are under the obligation to tell the truth? A. Yes.

Q. You are aware of that fact? [299]

A. Yes.

Q. Mr. Stromberg, I now show you a drawing which for purposes of identification has been marked as Plaintiff's Exhibit No. 7, and ask if you can identify this construction. A. Yes.

Q. What does it comprise, please?

A. It is the batching plant, the bin storage and the cement storage of the Oberg Brothers plant, which I sold to them.

(Testimony of Merle W. Stromberg.)

Q. You sold to them? A. Yes.

Q. Did you construct this plant? A. Yes.

Mr. Sellers: I offer into evidence as Plaintiff's Exhibit No. 7 the drawing which has just been identified.

The Court: It may be received.

The Clerk: Exhibit 7.

(The exhibit referred to was received in evidence and marked as Plaintiff's Exhibit No. 7.)

Q. (By Mr. Sellers): I now show you another ozalid print of a drawing which for purposes of identification has been marked Plaintiff's Exhibit No. 9, and ask if you can identify this construction.

A. Yes.

Q. What does it show? [300]

A. Complete plant with rock elevator, bin storage, weigh hopper construction, cement silo, cement elevator, and truck unloading screw and transfer screw.

Q. Did you make and sell this plant?

A. This is a drawing of a standard plant. There would be no way of identifying this as a plant that was sold.

Q. Does it contain a cement hopper positioned centrally of the aggregate hopper?

A. This drawing does not indicate it, but it would have aggregate hoppers and scales, as well as cement.

Q. I see. In other words, this drawing shows the exterior construction; the details of the aggregate hopper and the cement hopper are not shown?

(Testimony of Merle W. Stromberg.)

A. That is correct.

Q. However, this is the type of drawing, rather, this is a drawing of the type of plant in which the aggregate construction and the cement hopper construction which we have been discussing here would be incorporated?

A. Yes.

Mr. Sellers: I offer into evidence as Plaintiff's Exhibit No. 9 the drawing which has been identified.

The Court: It may be received as Exhibit 9.

The Clerk: Exhibit 9.

(The exhibit referred to was received in evidence and marked as Plaintiff's Exhibit [301] No. 9.)

Q. (By Mr. Sellers): Mr. Stromberg, did you ever see a hopper that did not have a discharge outlet?

Mr. Lyon: Your Honor, may I object to that until he clarifies what art he is talking about? Is he still talking about cement art or something else?

Mr. Sellers: I will limit it to the art of concrete batching.

Q. Did you ever see a concrete batching hopper that didn't have an outlet?

A. A concrete batching hopper?

Q. Yes. A. No.

Q. Did you ever see such a hopper that didn't have a body?

A. No.

Q. And such hoppers always have inlets, don't they?

A. Yes.

Q. Is it true, Mr. Stromberg, that in the Gardena plant which you constructed for Mr. Pearman that the cement flows into the stream of aggregate?

(Testimony of Merle W. Stromberg.)

A. The stream of aggregate is on both sides of the cement.

Q. Well, now, will you answer my question as to whether or not the stream of cement flows into the stream of aggregate, whether the cement flows into the aggregate? [302] A. No.

Q. Is it a fact, Mr. Stromberg, that you gave a deposition in my office, I believe it was in February of the year 1955?

A. The date I am not sure of, but I was in your office and gave a deposition.

Q. Do you remember that at that time I asked you questions concerning the flow of cement relative to the aggregate?

A. I don't recall the question.

Q. Do you remember that I asked you concerning the Gardena plant, whether or not the cement flowed into the aggregate or not?

A. No, I do not remember.

Q. Well, to refresh your recollection, I will read from page 25 of your deposition given on Tuesday, February 21, 1955, in my office, beginning at line 21.

“Q. All right. Now, to summarize, it appears you are willing to identify the two plants that we have that you have made, the Gardena plant and the Stanton Ready-Mix, is that correct?

“A. That's correct.

“Q. All right. Now, in each of those plants is it accurate to say that we had separate weighing means for the cement and for the aggregate?

(Testimony of Merle W. Stromberg.)

“A. That’s correct. [303]

“Q. Is it accurate to say that in each of those two plants the cement was discharged concentrically within the aggregates?

“A. The cement was discharged from a butterfly valve through a common gate in the aggregate hopper.

“Q. That doesn’t answer my question. I want to know if the cement was discharged physically within——

“A. Well, that did answer it, sir. It is a hopper within a hopper. It is a weighing mechanism by itself which is discharged at the same time or shortly after the aggregate has been discharged through a common gate.

“Q. So that the cement is positioned physically within the other aggregate?

“A. The cement is physically flowing through the other aggregate.

“Q. Concentrically, inside it?

“A. Flowing——

“Q. Answer yes or no, is it concentric?

“A. I wouldn’t use the word concentric.”

I would also like to read to you from the same deposition, page 27, beginning line 20:

“Q. Does the cement hopper feed into the flow of the aggregate? [304]

“A. The cement flows into the stream of aggregate.”

Now, I would like to have you tell us, Mr. Stromberg, whether or not the testimony given at that

(Testimony of Merle W. Stromberg.)

time in which you said the cement flows into the stream of aggregate is accurate or whether or not the testimony given today, when you say it does **not** flow into the stream of aggregate, is accurate.

Mr. Lyon: May I object to that question until he specifies at what point in the apparatus he is talking about? Are you talking about the aggregate hopper or are you talking about the gathering hopper, or some place in between? Or are you talking about in the mixing truck?

Mr. Sellers: He was able to answer that question without difficulty. I read you the question and he answered it at that time.

The Court: Overruled.

Mr. Sellers: Please read the question.

(Question read.)

The Witness: The cement, or, rather, as the aggregate is being discharged from the hopper, such as the Gardena plant, there is an oblong opening on the aggregate hopper which allows the material to flow from two directions, allowing the cement to have a free fall from the bottom of the butterfly valve down to and would go into the stream of aggregate if the fall was far enough, which I believe is about two and a half [305] feet, and within a foot to 18 inches the cement will mingle or go into the aggregate.

Q. (By Mr. Sellers): In other words, your answer given in the deposition is accurate, the stream of cement does go into the stream of aggregate?

A. At a certain point, yes.

(Testimony of Merle W. Stromberg.)

Q. No one asked you about limitations. Thank you.

I now show you, Mr. Stromberg, Plaintiff's Exhibit No. 14, which shows the relationship of the aggregates in the aggregate hopper below the cement in the cement hopper.

Before going into the operation, I believe that counsel yesterday made some mention of the fact that the drawing didn't quite show the proper size for the discharge of the cement. Should it be larger or smaller?

A. The opening at this point for the cement?

Q. Yes. A. That is adequate.

Q. What dimension there isn't quite right, Mr. Stromberg?

A. I haven't—we weren't discussing, I don't believe, sir, Section 33, which is through here, which does not include this discharge gate. You don't see it at this point at all.

Q. Well, as we see it here——

A. That is the butterfly valve.

Q. Yes. Are the dimensions here relatively accurate? [306]

A. Relatively?

Q. Yes, substantially. A. Yes.

Q. Why do you have the side walls of the aggregate batcher here sloping?

A. So that the material on either side will flow freely when the bottom gate of the aggregate hopper is open.

(Testimony of Merle W. Stromberg.)

Q. All right. When you open your bottom gate of your aggregate hopper, doesn't gravity acting upon the aggregate cause that to come tumbling down the side walls in a transverse direction?

A. It does not tumble down. It has a folding action in the material. As the side of the material is sliding down, the center more or less folds over actually and comes on down through the gate.

Q. Would it be a fact that the aggregate on the right-hand side here would come down and, having gained speed in a slanting direction, would tend to continue off toward the center of the gathering hopper? A. No.

Q. It would not? A. No.

Q. Would it be a fact that each one of these particles having moved transversely down the bottom here would upon reaching the bottom here immediately turn a corner and go downwardly? [307] Is that your position?

A. The speed is not so that the material will have an opportunity to carry into the center.

Q. Did you ever measure the speed?

A. Measure the speed?

Q. Yes. A. No.

Q. Have you ever stood and watched some of the aggregate dribble out of a hopper, some of the remaining aggregate, and did it come right to the edge and fall down, or was it not a fact that it came out, slid down this incline, and tumbled over towards the center of the gathering hopper?

A. The remaining aggregate left in the hopper.

(Testimony of Merle W. Stromberg.)

Q. Well, do I understand you to say that the remaining aggregate would act in one way, and when there is more aggregate in there, it acts in another? A. Yes.

Q. Do I understand you to say that part of the aggregate is acted upon by gravity and part of it isn't?

A. It is all acted upon by gravity.

Q. Have you ever seen a ball roll down a roof, Mr. Stromberg? A. Yes.

Q. When that ball reaches the edge of the roof, does it go vertically downward from the very edge of the roof, or does [308] it describe an arc off the edge of the roof, so that it actually falls and strikes the ground, not right vertically below the edge of the roof, but off a space from the edge?

A. A space off.

Q. Why would not a piece of rock in this aggregate sliding down this inclined surface do the same thing?

A. It is very possible that it would have a slight movement off to a vertical position, but I doubt if anyone could ever measure it.

Q. Well, no one asked you to measure it. You seemed to know that it fell straight down, and I want to know why you know that it falls straight down. A. At this point.

Q. All right. Now, let's just take a piece of aggregate, rock in here, that comes sliding down this side wall. A. By itself?

Q. I don't care. We will put it by itself.

A. All right.

(Testimony of Merle W. Stromberg.)

Q. It slides all the way down from here, it slides down this incline. Do you mean to say that hitting here, it will then go straight down, or will it not go in an arc and tend to hit the center here?

A. A piece of aggregate sliding down that slope by itself will arc and be quite some distance from the edge.

Q. And wouldn't every other piece of aggregate in there [309] having the same direction of movement tend to do the same thing?

A. Not every piece.

Q. Well, which piece of aggregate wouldn't?

A. The mass of aggregate will have a tendency to drop vertically.

Q. How did this material get over here in the center? A. How did it get over there?

Q. Yes, the aggregate. A. The rock——

Q. Oh, I beg your pardon. Let's don't charge it. It is in the hopper. How did it get from up here down here? You have aggregate in the hopper. I want to know how does it happen there is any aggregate below the cement hopper?

A. Yes, there is aggregate.

Q. How did it get there?

A. It hit the sides of the weigh hopper and due to the fact that there was a void, it filled that void.

Q. All right. Now, we have aggregate sliding along the inclined surface. We have other aggregate on top of that? A. Yes.

Q. It is all tending to move down under the action of gravity? A. Yes.

(Testimony of Merle W. Stromberg.)

Q. All right. Wouldn't the part on top form an upper [310] layer which would tend to move in the same general direction as the layer on the bottom? You have said that one piece would tend to be projected in an arc, and I ask you why another piece on top of that wouldn't tend to be projected in the same arc.

A. In a mass form I don't think it would be visually possible to determine the arc the mass would move toward the center.

Q. You are not a physicist, are you, Mr. Stromberg?

A. I am not, sir.

Q. You are basing your opinion there upon what?

A. Practical experience and knowledge of batching equipment.

Q. Have you ever looked inside of the aggregate hopper to see what these pieces did up above that sloping surface?

A. Yes.

Q. How did you look in there? From the side view?

A. No, from the top.

Q. You looked in from the top, and all you could see was the top surface, wasn't it?

A. Yes.

Q. All right. So that you didn't know what these pieces were doing down here in the bulk of that aggregate, did you?

The Court: Do you know? [311]

Mr. Sellers: No, but I am not the witness, your Honor.

(Testimony of Merle W. Stromberg.)

The Court: Does anybody know? Nobody has been down there. You can't see.

Mr. Sellers: Your Honor, the fact of the matter is that this is a simple matter of physics, that if you have a sloping surface here and you have a mass going down that sloping surface——

The Court: There will be a slight arc, that is right, slight arc, and this witness says it is so slight that you can't measure it.

Q. (By Mr. Sellers): Did you ever try to measure the arc, Mr. Stromberg?

A. I had no reason to.

Q. You never tried to? A. No.

Q. When you say a slight arc, how slight do you think it is?

The Court: Have you got any evidence to show what that arc is?

Mr. Sellers: I have evidence to show that there is mixing taking place here and the aggregate is projected down into the center, and that the cement falling into it will mix with it, your Honor.

The Court: I know, but that doesn't say the extent of the arc. [312]

Mr. Sellers: Well, I think, your Honor, it is important to determine that the aggregate just doesn't hit the edge here and fall straight down.

The Court: Are you trying to convince this witness or me?

Mr. Sellers: I would like to convince you, your Honor.

The Court: I am convinced there is probably a small arc there.

(Testimony of Merle W. Stromberg.)

Mr. Sellers: You are convinced there is a small are?

The Court: I am convinced there is aggregate coming down both sides and they hit in the middle.

Mr. Sellers: And you are convinced of that?

The Court: In the middle and they go down.

Mr. Sellers: And you are convinced, also, if I may ask, that the cement falls into that body of aggregate which is meeting along the middle?

The Court: That's right, they commingle.

Mr. Sellers: Fine. Thank you, your Honor.

Q. You built the Gardenda plant, you said, Mr. Stromberg. Where did you say you got that design?

A. The design of the plant was drawn by an engineer that formerly had worked for Conveyor Company.

Q. It was drawn, but where did you get the design?

Mr. Sellers: I wish just to make the point, where did he get it, not where anyone else got it, but where he got it.

Mr. Lyon: I believe he testified to that yesterday afternoon. [313]

The Court: I think he testified to it. I think you are going over the same ground.

Mr. Sellers: All right. I just want to make it clear.

Q. Did you say you got it from Mr. Pearman, that he gave you the design, is that correct?

A. He did not give me the design of the plant. He gave me his idea of what he wanted, as far as

(Testimony of Merle W. Stromberg.)

the aggregate and cement hoppers was concerned, and the cement and aggregate scales.

Q. He told you what he wanted?

A. But he did not design the plant.

Mr. Lyon: I object. This is going over the same ground he testified to yesterday.

The Court: Objection overruled.

Q. (By Mr. Sellers): Did I understand you to say, also, yesterday that prior to the time you made the Gardena plant, you had never seen a plant in which the cement hopper was positioned physically within the aggregate hopper, the two being independently weighable? Is my recollection right on that, did you say that? A. I did.

Q. Do you remember when you were giving your deposition in my office, Mr. Stromberg, I asked where you got the design for the Gardena [314] plant? A. I do not recall the question.

Q. I asked you:

“Q. Where did you get the design for the Gardena plant?

“A. The weigh hopper was, I believe, designed by an employee or former employee of Conveyor Company.

“Q. And where did he do that work?

“A. Where did he do the designing?

“Q. Yes.

“A. I think in his home, to the best of my knowledge.

“Q. What was his name?

“A. Well, I wouldn't know. The prints were

(Testimony of Merle W. Stromberg.)

made up and handed over to the subcontractor, you might call him, and the plant was fabricated from there.”

Now, I would like to know, did you get the design from Mr. Pearman, as you said yesterday——

The Court: The testimony by Mr. Pearman was that he had the idea and Mr. Pearman didn't draw the design.

Mr. Sellers: No, your Honor——

The Court: This witness testified Mr. Pearman gave him the idea.

Mr. Sellers: Yes. [315]

The Court: If I remember the testimony correctly, after Mr. Pearman gave him the idea and told him what he wanted, he went and had the design made.

Mr. Sellers: Your Honor, I think there is possibly a misunderstanding in words and maybe that is an excuse, but design is merely the physical embodiment of the idea. In other words, you have an idea——

The Court: Mr. Pearman said, “I had the idea.” He never said he drew the design. He said he had an idea and gave it to the defendant and the defendant went ahead and followed the idea.

Mr. Sellers: All right. You distinguish between the drawing and the mental concept.

The Court: Mr. Pearman never said he drew any plans.

Mr. Sellers: No, he didn't, your Honor. He said he had the idea.

(Testimony of Merle W. Stromberg.)

The Court: He said he had the idea.

Mr. Sellers: And gave it to the witness.

The Court: And the witness then proceeded with that idea and drew up the plans, as I understand it?

Mr. Sellers: Yes.

The Court: All right.

Mr. Sellers: It is my understanding from the testimony I have just read, your Honor, that the design for the plants came from a man who formerly worked for the Conveyor Company, [316] and I think that it is possible and, in fact, probable that the design embodied the ideas of the man who drew it up.

The Court: Well, we have got Mr. Pearman's testimony that he is the one who implanted the idea in the defendant's mind.

Mr. Sellers: Yes.

Q. Do you know whether or not it is a fact, Mr. Stromberg, that Conveyor Company prior to that time had built plants having a centrally positioned cement hopper and side positioned aggregate hoppers? A. Repeat the question, please.

(Question read.)

A. I do not recall the Conveyor Company building an aggregate hopper with the cement compartment in the center, on separate scales.

Q. By that you mean you never saw one of the plants they built?

A. I don't recall of seeing one prior to 1950. It is possible that the cement hopper would have

(Testimony of Merle W. Stromberg.)

been on the outside, or it is possible that it could have been on the inside, but I do not recall of a definite plant whereby they had the aggregate or cement hopper within and on a separate scale.

Q. But you do remember you never saw such a plant, either built by Conveyor or anyone else prior to the time you built the Gardena plant? [317]

A. To the best of my knowledge, I do not.

Q. Are you pretty certain about that?

A. I am.

Q. You are positive? A. I am.

Q. Is it a fact that as a general rule the batching plants which you have built, the cement was weighed in its own hopper in the center?

Mr. Lyon: May I have that question read?

(Question read.)

The Court: As I understand, the first batching plant you built was at the Gardena plant?

The Witness: That is correct.

The Court: After the Gardena plant was built and you built subsequent plants, did you always put the cement hopper in the center?

The Witness: Not always.

Q. (By Mr. Sellers): Did you as a general rule?

A. There were a number of plants whereby the cement was positioned in the center on a separate scale.

Q. Well, I would like an answer to my specific

(Testimony of Merle W. Stromberg.)

question, whether or not as a general rule you positioned it in the center.

Mr. Lyon: I object to that, your Honor, until we have some definition of what he means by general rule. [318]

The Court: Overruled.

Mr. Lyon: There is no showing whether the witness and he are thinking of the same thing.

The Court: Overruled.

The Witness: I would have to presume you are wanting me to give a percentage as to the number of plants I have built that have hoppers, separate hoppers for the aggregate and cement, in comparison to the total amount.

Q. (By Mr. Sellers): I don't want you to presume. A. I would say 50 per cent.

Q. Well, then, you would say it was not the general rule, it was about half the time?

A. Yes.

Q. I would like to read to you your answer to that question that you gave in the deposition above referred to.

"Q. Was the cement positioned centrally with respect to the other material being discharged?

"A. As a general rule, the cement was weighed or had a common hopper of its own in the center."

Mr. Lyon: If this is for the purpose of impeachment, your Honor, I would like to object to the form of the question. The question at that time was as to—what was it?

(Testimony of Merle W. Stromberg.)

Mr. Sellers: February, 1953, about three years ago. [319]

Mr. Lyon: Your last question was dated as of this date. The so-called general rule can change in a year.

The Court: Overruled.

Q. (By Mr. Sellers): It is a fact, is it not, Mr. Stromberg, that you can build two-scale plants that do not embody the cement hopper in the center?

A. It is a fact.

Q. Then how does it happen that in the plants you have built which, depending upon which statement we accept, you either put the cement in the center as a general rule, or 50 per cent of the time, how does it happen you put the cement in the center such a large part of the time?

A. It depends on the design of the plant, and if space is a particular item to be considered. Also, if the customer wants two scales, one for cement and one for aggregate.

Q. All right. At the Stanton plant was there any necessity of conserving space?

A. As far as area is concerned, no.

Q. Can't you have separate scales without putting the cement in the center?

A. You can have.

Q. Then I would like to have you answer my question, why it is that you prefer to put the cement in the center, even though you have separate scales, and even though you may not have any shortage of room? [320]

(Testimony of Merle W. Stromberg.)

A. The construction of the plant, you don't have to build it so wide, for one thing, and you don't have to raise it in the air another two or three feet to get the proper flow or angle for the cement to flow into your gathering hopper.

Q. In other words, the center position of the cement hopper gives you certain advantages that you find desirable, is that correct?

A. It does regardless of whether it has a scale or doesn't have a scale.

Q. Would you say it enabled you to build your entire plant lower, cut down the height?

A. I would say I can conserve about two feet and a half.

Q. Would you say that it enabled you to use less steel in building the plant?

A. That would be a minimum of cost.

Q. It enables you to operate the plant at less cost because you don't have to lift the material, so high, isn't that right?

A. No.

Q. Now, just a minute. If the plant is lower, you don't have to lift the materials as high, do you?

The Court: You are talking about two feet now.

Mr. Sellers: Your Honor, I would point this out to you. If you had to go two feet, with tons and tons of material, it [321] ceases to be two feet. It becomes a great deal of work and becomes very expensive, as any expert in this field will testify. Actually, two feet——

The Court: We have got an expert here.

Mr. Sellers: He is not my expert, your Honor.

The Court: You said any expert.

(Testimony of Merle W. Stromberg.)

Mr. Sellers: I mean this is one of the defendants, your Honor, the defendant. I prefer not to make him my expert.

Q. If the two feet isn't important, why did you mention it, if that isn't one of the reasons you put the cement in the center, why did you bother to mention that? Is it important or isn't it?

A. I don't think it is important.

Q. Then why did you mention it as one of the reasons for putting the cement in the center?

A. The height of the aggregate elevator would be increased two feet and your normal flow of your material from your swing spout on top of the plant into the two outside bins can either be two feet off from the bin, or you can have the chutes directly down on top of the bin, or almost on top of the bin. That two feet could be taken up in the rock elevator itself. Although the plant can be raised, you would not have to raise the height of the rock elevator and still you would get the same discharge into any one of the four compartments.

Q. Do I understand you just got into the habit of making [322] the plants two feet lower? You don't consider it to be important, but you just do that because you got in the habit of it?

A. I believe one of the drawings you just showed me——

Q. I would like to have my question answered.

A. I believe one of the drawings you just showed me this morning would show that there is a concrete footing underneath each column of the plant.

(Testimony of Merle W. Stromberg.)

Mr. Sellers: I move that answer to be stricken, your Honor. It is not responsive.

The Court: It may go out.

Q. (By Mr. Sellers): Now, I would like to have you answer my question.

Mr. Lyon: If allowed to complete the answer, I think there is the point you are driving at.

The Court: Well, he didn't answer the question, except indirectly. He can answer the question and then he can explain the answer if he wishes.

Q. (By Mr. Sellers): You have mentioned in addition to the decrease in height which you gave as a reason for using the cement in the center and then said it was not important, you also gave the matter of the flow of cement into the plant as being a feature concerning which you gained advantage by the center positioned cement hopper.

Explain that, if you will, please. [323]

A. Well, you reduce the size of the gathering hopper in diameter, if it is a round one, or it could be an oblong gathering hopper, if the cement is positioned in the center. It will allow your gathering hopper to be a great deal smaller.

Q. And what is the difference there? Of what importance is that?

A. Well, the importance there, I believe, would be the controlling the aggregate in the gathering hopper a little bit better.

Q. Controls the aggregate in the gathering hopper better?

A. That's right, if it is smaller.

(Testimony of Merle W. Stromberg.)

Q. If it is smaller. All right. Does it have any other advantage in making the gathering hopper smaller?

A. By making the aggregate hopper smaller, you——

Q. Not the aggregate hopper, the gathering hopper.

A. I am sorry. By making the gathering hopper smaller, it will decrease actually in the overall height of the plant, too.

Q. In other words, you cut down the overall height of the plant then by virtue of the fact that the gathering hopper is smaller. Why is that?

A. I believe I just answered that.

Q. You have said the fact that the gathering hopper is smaller makes it possible to lower the plant, I believe? [324]

A. Yes.

Q. All right. I ask you why, how?

A. By reducing the height, you are not using the footage of steel as far as structure is concerned.

Q. All right. In other words, it does effect a saving through reducing the size of the gathering hopper and further reducing the size of the plant, is that correct?

A. Yes, a minimum.

Q. Now I ask you, you stated that by having a smaller gathering hopper, you actually protected the aggregate. Isn't the cement protected?

A. The cement is proportioned, ribboned from the center compartment where the cement is down through.

(Testimony of Merle W. Stromberg.)

Q. What do you mean by ribboned?

A. Well, by using the butterfly valve, you have a ribbon effect on your cement.

Q. Supposing you open the valve completely, do you have any ribbon effect?

A. When you open the valve completely, the valve itself is in a vertical position. You have a stream then.

Q. All right. So that the ribbon is only something that is incidental, depending upon whether you position the valve in a partially open position or not?

A. It is very important, because it is controlled by the operator. [325]

Q. Yes, but he need not have a ribbon if he doesn't want it, need he?

A. If he is discharging his aggregate and cement at the same time, he ribbons the aggregate as well as the cement.

Q. Will you please answer my question? Does he need to have a ribbon if he doesn't want it? Can he open his valve and discharge the cement and aggregate together?

A. Yes.

Q. And open the full width of the discharge?

A. Yes.

Q. And you don't have a ribbon then, do you?

A. You have a flow.

Q. Answer my question. You don't have a ribbon, do you?

A. No.

Q. Thank you. All right, now, I want to get back to the point you said you protected the aggre-

(Testimony of Merle W. Stromberg.)

gate by making the hopper smaller. I asked you whether or not you didn't also protect the cement. I don't believe I received an answer to that.

The cement is really the valuable subject here. It costs much more than the aggregate, does it not?

A. Yes.

Q. Now I want to know whether the cement isn't protected in the smaller hopper from being lost, being blown away, or [326] from any other disadvantage?

A. I don't see what protection you would have unless there was a shroud between the gathering hopper and the weigh hopper.

Q. Will you kindly explain, then, why it is the smaller hopper is able to protect the aggregate and is not able to protect the cement?

A. Well, it does protect the cement.

Q. Thank you. I thought you said it didn't.

A. It does protect the cement, but if you have a shroud completely around the gathering hopper attached to your weigh hopper, a flexible shroud, you have 100 per cent protection.

Mr. Sellers: I move the last be stricken as not responsive, your Honor.

The Court: Denied.

Q. (By Mr. Sellers): Now, I would like to know, supposing instead of having a central feed for the cement, as you have here in the Stanton plant, you have the cement come in from the side in a side feed down into this gathering hopper. would you please describe the action that takes

(Testimony of Merle W. Stromberg.)

place in that event? To make it clear, the cement comes in from the side of the gathering hopper in a side feed plant. Is that typical of a side feed plant? A. That could be typical. [327]

Q. So that instead of the cement coming down through the center as we have it here in the Stanton drawing, Exhibit No. 14, it comes in and comes down the side of the hopper, and that would also be at one side of the stream of aggregate, would it not? A. Yes.

Q. Do you know what happens down in the gathering hopper under those conditions?

A. Your stream of aggregate would be flowing directly down and your cement would be coming in from a side angle.

Q. What happens to the cement?

A. There would be a portion of the cement dust that would gather or collect around the gathering hopper.

Q. In other words, the stream of aggregate going down through the gathering hopper would cause the cement coming in at the side to be formed into dust and you would lose a lot of cement, would you not?

A. No, you would not lose a lot of cement, but you would have a dust problem.

Q. Well, what forms the dust?

A. It doesn't take a great quantity of cement to make a lot of dust.

Q. Well, I want to know what forms the dust?

A. Cement and dry aggregates, if you have dry aggregates. [328]

(Testimony of Merle W. Stromberg.)

Q. In other words, with the cement coming down the side and striking the stream of aggregates, some of the cement is formed into dust?

A. It will develop a dust before it ever hits the aggregate.

Q. Upon striking the aggregates, will it form more dust?

A. No; I don't believe it would, because there is moisture in the aggregate, and I believe it would more or less control it to a certain extent.

Q. Let's assume that the aggregate isn't moist. What happens then?

A. I wouldn't say that the dust would increase. I think it would remain about the same.

Q. In other words, you would get about the same amount of dust, say, sliding the cement down the side of the hopper as you would having a fast dropping stream of aggregates going right by it. the same amount of dust in each case?

A. If the cement is being discharged into the side of the gathering hopper; yes.

Q. In the Stanton plant type of construction, Exhibit No. 14, where the aggregate is positioned around and encircles the stream of cement, even though there is intermingling, as you have stated, would it not be a fact that you would have aggregate around the sides of the cement and that therefore [329] you would have less forming of dust?

A. They still have a dust problem. It is very possible it does cut the dust down a little bit.

(Testimony of Merle W. Stromberg.)

Q. Now, I don't want a probable. I want to know whether or not you have observed this type of plant in operation and whether or not you don't know as a matter of fact.

A. I do know; yes.

Q. And it does cut it down; doesn't it?

A. Yes; it does.

Q. Referring now to this Exhibit 14, would you please, with a pencil, mark on the Fig. 3 the approximate size of the opening which you believe should be there, rather than the opening which is now present, if you can?

A. Opening of what?

Q. I don't know. I believe Fig. 3 is not quite accurate according to your understanding, and I would like to have you indicate just where you think it should be changed.

The Court: You will have to mark it so it can be seen.

Mr. Denny: What do you say we make an overlay on that?

Mr. Sellers: All right, if you have transparent paper, you can indicate on there, can't you, with the pencil?

The Witness: Yes.

Mr. Sellers: And we can darken it later, your Honor.

(Witness complying.)

Q. (By Mr. Sellers): You have drawn two parallel lines [330] on Fig. 3 of Exhibit 14, Mr.

(Testimony of Merle W. Stromberg.)

Stromberg. What did you intend to indicate by those two parallel lines?

A. The opening, or the gate, rather, at the bottom of the aggregate hopper.

Q. Would that change the operation of the construction, in your opinion?

A. It changed the construction.

Q. In what way?

A. Instead of having round openings as indicated in Fig. 3, my discharge gate on the aggregate is an oblong gate 12 inches by 24 inches.

Q. Is it not a fact that the round member shown in the center, I think the fact is that the round opening shown in the center is the butterfly valve in the cement hopper, Mr. Stromberg?

A. That's right.

Q. Actually, you don't see the valve. The valve is down below the aggregates that you see in Fig. 3, if I am not mistaken.

A. I do not have a straight solid line there. I have a broken line which indicates my gate below.

Q. In other words, the drawing is not inaccurate, but, in other words, you merely would like to have shown something that is down below the aggregate?

A. That is the complete description then of Fig. 3 taken [331] at this elevation.

Q. Taken at that elevation. At that elevation, what you see on that elevation, without going below, Fig. 3 is accurate; is it not?

A. That is correct.

(Testimony of Merle W. Stromberg.)

Q. It has been suggested by counsel, Mr. Stromberg, if you will make an overlay of the change you put on Fig. 1 there, mark the outside dimensions, then you can check it on another figure and see if it is accurate.

Mr. Denny: Just draw the same lines there as you would like to have them appear here, and you can check them for accuracy. For example, if these lines here take a certain position, they should correspond with the discharge here, if it is correct.

Mr. Sellers: The point, your Honor, not that it is important, but the lines Mr. Stromberg has drawn, the dotted lines, are not seen looking down here. This is a view looking down.

The Court: But he didn't make the drawing. He is just saying how the drawing should have been made according to his opinion.

Mr. Sellers: That is correct. If any importance is attached in that change from the standpoint of operation, we would like to know it.

The Court: I don't know whether it is important or not. [332] I don't know what difference it makes.

Q. (By Mr. Sellers): Mr. Stromberg, do you view that change as being of any importance?

The Court: I don't know how it is going to affect this case in any way. It may be important in how the plant operates, but as far as this case is concerned, I don't know how it is going to affect it.

Q. (By Mr. Sellers): Do you know how the change in dimensions you have identified there,

(Testimony of Merle W. Stromberg.)

Mr. Stromberg, would have any effect upon the operation of the cement hopper or the discharge of the aggregate hopper? Would they not discharge the same way? A. Yes.

Q. Thank you very much. In addition to the Stanton plant, Mr. Stromberg, did you also make a Jones Concrete Plant in Santa Monica?

A. Yes.

Q. Is it not a fact that the Jones plant is, member for member, almost identical to the Stanton plant?

A. On the bin structure, the rock elevator, the weigh hoppers and the scales; yes.

Q. So that everything that we are concerned with in this action, we have discussed here, substantially member for member, the Jones plant is identical with Stanton?

A. The Jones plant is identical, member for member, on [333] the aggregate weigh hopper and cement weigh hopper.

Q. And their relationship as shown in Exhibit 14? A. Yes.

Q. Did you make a plant located in Culver City, Mr. Stromberg? A. Yes.

Q. Was it the same type as the Stanton plant?

A. No.

Q. Did it have a central hopper, cement hopper, with side aggregate hoppers? A. Yes.

Q. Independently weighable? A. Yes.

Q. Would not Exhibit 14 here identify the type of construction you had in the Culver City plant?

(Testimony of Merle W. Stromberg.)

A. It would identify the aggregate hoppers and the cement hopper.

Q. And its type of operation was similar to the operation we have been discussing in connection with the Stanton plant?

A. Yes; outside of the gathering hopper.

Q. Is it true you sold a plant of this type to Oberg Brothers in Los Angeles?

A. Yes; outside of the gathering hopper.

Q. Is it true you sold such a plant to the S. P. Milling [334] Company in Santa Maria, California?

A. No.

Mr. Lyon: Your Honor, may I inquire of counsel as to the purpose of this? My understanding is there will be an accounting for damages if there is any liability later. He is just asking him if he built such and such a plant.

The Court: Well, I am wondering. It seems to me you have established that there are at least several plants here that are similar to the patented plant. Do you have to go any further?

Mr. Sellers: Your Honor, I am quite willing to drop this line if it is understood we have only proved an example and the matter of damages depends on the extent of the infringement. I don't need to push the questions further along this line with that understanding.

Q. I would like to ask one more question concerning the building of the Gardena plant. Did you, prior to the time you built the Gardena plant, ever

(Testimony of Merle W. Stromberg.)

see a weigh batcher in which the cement was discharged into the center of the aggregate discharge?

A. Would you repeat the question?

Q. Did you, prior to the time you built the Gardena plant, ever see a weigh batcher in which the cement was discharged into the center of the aggregate discharge?

A. Yes. They were on the same scale. [335]

Q. In other words, they had a central discharge all on one scale? A. Yes.

Mr. Sellers: Any examination, Mr. Lyon?

The Court: Well, it is 11:00 o'clock, and I think we will take the morning recess. We will now recess until 10 minutes after 11:00.

(Recess.)

The Court: You may proceed.

Mr. Lyon: At this time, your Honor, I would like to inquire as to the procedure your Honor desires to follow. Do you want me to take Mr. Stromberg off the stand and put him back on later? I have a lot of things Mr. Sellers has not gone into. Or do you want me to cross-examine him on what Mr. Sellers has inquired about?

The Court: It doesn't make a particle of difference to me.

Mr. Lyon: I would just as soon take him off the stand, assuming I am not waiving any opportunity to go into these matters if I put him on in my case.

(Testimony of Merle W. Stromberg.)

The Court: As far as I am concerned, you are not waiving anything.

Mr. Lyon: Then I have no questions.

The Court: You may step down.

(Witness withdrawn.) [336]

Mr. Sellers: Mr. Pinne, will you take the stand, please?

DOUGLAS E. PINNE

called as a witness by and on behalf of the plaintiff herein, having been first duly sworn, was examined and testified as follows:

The Clerk: Will you state your name, please?

The Witness: Douglas E. Pinne.

The Clerk: Will you spell your last name?

The Witness: P-i-n-n-e.

Direct Examination

By Mr. Sellers:

Q. Mr. Pinne, in your testimony the people over at the attorneys' table want to hear what you say, so will you speak a little louder, please?

Mr. Pinne, what is your occupation, please?

A. I am a superintendent of a rock concern in Southern California.

Mr. Lyon: I can't hear what the witness is saying.

The Court: You will have to speak up a little louder.

(Testimony of Douglas E. Pinne.)

The Witness: I am superintendent of distribution for one of the rock companies in Southern California.

The Court: Well, is it a secret?

The Witness: No, sir. [337]

The Court: Which one is it?

The Witness: Consolidated Rock Products.

The Court: Consolidated Rock Products. All right.

Q. (By Mr. Sellers): How long have you held that position, Mr. Pinne?

A. For about eight years.

Q. In that position do you have charge of ready-mix batch plants? A. Yes, sir.

Q. About how many? A. At present, 23.

Q. Do you also have charge of the trucks of the type that carry the mix from the plant to the job?

A. I am responsible for the concrete that is hauled in the ready-mix trucks.

Q. And about how many of those do you have?

A. I believe, at present, 230.

Q. In order to give the court some of your background, I wonder, Mr. Pinne, if you will be so good as to give some of your experience in this field in order that the court may know how much weight to give to the evidence that you are about to give. Going back, let us say, to your job as a weigh master, when was that?

Mr. Lyon: May I inquire, sir, are you trying to qualify this man as an expert? [338]

Mr. Sellers: No; I am not trying to qualify him

(Testimony of Douglas E. Pinne.)

as an expert except to this extent. I am going to ask him some opinion questions, and to that extent he will be an expert; but he is also here as a fact witness, the type his Honor wanted, witnesses who not only had seen the theory but had stood beside the truck, and this gentleman has stood beside the truck. I am trying to give the court——

The Court: Go ahead. There is no objection.

Q. (By Mr. Sellers): Will you please state your background, Mr. Pinne?

A. I started to work for the predecessor of Consolidated Rock in March, 1925, as a public weigh master. Through the years, I did different jobs within the company from a weigh master to equipment operator, and finally ready-mix concrete came along, and in its infancy we built our own plants——our plant in those days.

Along about, I believe, 1933, I accepted a position, I passed a civil service examination with the State of California and was with the Division of Highways for a year.

Q. In what capacity?

A. Equipment and maintenance.

Q. What type equipment?

A. All types for the State, whatever they happened to have in that district.

Q. Were you a shovel operator back in about 1933-1934? [339]

A. That's right.

Q. And around 1934-1935 were you a batching plant operator?

A. Again with this company.

(Testimony of Douglas E. Pinne.)

Q. With the Consolidated Rock Products Company?
A. That's right.

Q. Just for the record, how big a company is Consolidated Rock Products Company, relatively? Is it one of the big ones in the country?

A. It is the largest west of the Mississippi.

Q. Back in 1934 and 1935, what type of a plant was it at that time? Was it a single stop plant or what type?
A. Well——

Q. Or multiple stops?
A. Multiple stops.

Q. And then in 1935-1936, you became a shovel operator again; did you?
A. That's right.

Q. That was loading rock and gravel and that sort of thing?
A. That's right.

Q. Then about 1936 to 1944, what were you doing in that period?

A. Back in maintenance and repair and erection of later-type batch plants. [340]

Q. For what company?

A. Consolidated Rock Products.

Q. Did you come in contact with all types of batching equipment at that time?

A. Practically all the time.

Q. Did you come into contact with the various types of concrete conveying means, including mix trucks and dump trucks?
A. Yes.

Q. Then from 1944 to 1946, what were you doing in that period?

A. I was in business for myself in the ready-mix concrete.

Q. Were you operating a plant?

(Testimony of Douglas E. Pinne.)

A. Yes.

Q. And then from about 1946 to—put it this way, when did you go to work for the Consolidated Rock Products Company the last time?

A. In December, 1947, I believe.

Q. Would you like to think about that? Are you sure of that date? A. 1948.

Q. Thank you. At the time you went to work for the Consolidated Rock Products Company on December 1, 1948, how many batching plants did the company have at that time?

A. I believe approximately 11. [341]

Q. Eleven. Did you at that time take your present job as superintendent of distribution?

A. Approximately the same job I had.

Q. Were these various plants under your control and direction? A. Yes.

Q. Were these plants of different types?

A. Just about every type.

Q. About every type. Were some of the plants of the type having a central cement hopper with aggregate hoppers at the side? A. Yes.

Q. Were some of the plants the type having the cement hopper outside and at one side of the aggregate hoppers? A. Yes.

Q. Did you operate these plants? A. Yes.

Q. Did you watch them while they were in operation? A. I did.

Q. Was the operation of these plants under your control and direction? A. It was.

Q. At that time how many, approximately, con-

(Testimony of Douglas E. Pinne.)

crete carrying trucks were under your control and direction?

A. I believe at that time we had 65. [342]

Q. 65. Did you come into intimate contact with these trucks? A. Yes.

Q. Was their operation and repair under your control and direction? A. No.

Q. What connection did you have with them?

A. Responsibility of the proper concrete or mix, may I say, getting inside of those trucks.

Q. Did you come in contact with them in the operation of the batching plants? A. Yes.

The Court: May I ask the witness a question?

Mr. Sellers: Surely.

The Court: When did you first obtain any knowledge of the Johnson batching plant? What was your first knowledge of the Johnson batching plant?

The Witness: I first came in contact with it in about 1948, to have a real knowledge of it.

The Court: Well, I didn't mean real knowledge. When did you first know there was a Johnson batching plant?

The Witness: Well, of course, in the trade journals I have read their advertisements for a number of years.

The Court: When did you first see one, then?

The Witness: Let's see. This is 1956. [343]

The Court: Speak up loud so the attorneys can hear you.

(Testimony of Douglas E. Pinne.)

The Witness: Well, to be safe, I will say in 1948.

Mr. Sellers: May I suggest, your Honor, that possibly you might refer to plants of the Conveyor Company type. Does that take the date back?

The Court: Now, just a minute. You say that in 1948 there were 11 batching plants, Consolidated had 11 batching plants.

The Witness: That's right.

The Court: These 11 batching plants in 1948, how many of them had the concrete bin, the concrete in the center of the gravel and sand?

The Witness: I believe there were six at that time of the 11.

The Court: Six?

The Witness: I believe so.

The Court: Do you know when those six were first installed?

The Witness: No; I do not know when they were installed, because they were bought second-hand, some of them, and two of them were built new. I do not remember the dates.

The Court: In 1934 and 1935, you said that there were some batching plants there that you had supervision of.

The Witness: No; I had no supervision in those days. I was a batch operator. [344]

The Court: You were a batch operator?

The Witness: Yes.

The Court: When you were a batch operator,

(Testimony of Douglas E. Pinne.)

did you operate a plant where the cement was in the center?

The Witness: No; not at that time.

The Court: When did you first come in contact with any batch plant where the cement was in the center?

The Witness: I would say along about 1940.

The Court: 1940. Speak up loud, now.

The Witness: About 1940, I believe. I am not positive without looking over my old payroll sheets and the like of that to refresh my memory. I had no idea I was going to be here today.

The Court: Your best recollection is that you——

The Witness: I believe so.

The Court: ——you didn't come in contact with batching plants that had the cement in the center until about 1940?

The Witness: Yes. I think that is pretty close, I believe, as close as I can recollect.

The Court: Did you have any at the Consolidated at that time?

The Witness: In 1940? Yes.

The Court: You don't know how long they were there?

The Witness: No; I do not, because before that I was at one place rather than in charge of anything. [345]

The Court: All right.

Q. (By Mr. Sellers): When you went to work for Consolidated on January 1, 1948, they did have

(Testimony of Douglas E. Pinne.)

batching plants of the type in which there was a central cement hopper with an aggregate hopper on the side of that? A. Yes, sir.

Q. Was it or was it not a fact that Mr. Merle Stromberg was employed by that company at the time you went to work there? A. Yes, sir.

Q. And was it not a fact that Mr. Merle Stromberg remained employed with that company for a period of 21 days after you went there and quit the company to the best of your information and belief on December 21, 1948? A. Yes, sir.

Q. And at the time, to repeat, there were in the Consolidated Rock Products Company's business and under your charge plants of the type in which there were a centrally positioned cement hopper and aggregate hoppers at the side, the cement hopper discharging down through the aggregate hoppers? A. Yes, sir.

Q. At the time you went to work for Consolidated in December, 1948, what were Merle Stromberg's responsibilities?

A. He was in charge of a maintenance crew.

Q. Maintenance, doing what? [346]

A. Repairing the batching plants and anything to do with them, bunkers and anything that had to do with the batching plants.

Q. The batching plants of Consolidated?

A. That's right.

Q. Now, is it a fact, Mr. Pinne, that you have operated batching plants, you have watched batch-

(Testimony of Douglas E. Pinne.)

ing plants in operation, and you have inspected batching plants? Will you please answer that?

A. I did not understand.

Mr. Sellers: Please read the question, Mr. Reporter.

(Question read.)

The Witness: Yes, sir.

Q. (By Mr. Sellers): Is it a fact that in your position as manager for Consolidated, you have the authority to purchase batching plants?

A. Yes, sir.

Q. And you also have the authority to move them from place to place, if that be necessary?

A. Yes.

Q. Have you in your experience had occasion to observe the operation of batching plants of the side feed type? A. Yes, sir.

Q. Would you please describe what you have observed in the operations of the plants of the side feed type as [347] distinguished from the central feed, which is the type we see illustrated in Exhibit 14? I think you are familiar with it. The cement feeds into a central hopper down through the aggregate, which comes from hoppers on the two sides? A. Yes; that's right.

Q. Will you describe what you have seen in your observation of the side feed plants?

A. We have a problem of applying the cement, may I say, to the aggregate in a satisfactory man-

(Testimony of Douglas E. Pinne.)

ner in the gathering hopper when it feeds in from the side.

Q. Would you please explain what that problem is?

A. The cement is not falling vertical and, consequently, when it is turned on with the aggregate, it has a tendency to spill or fluff up, as it were.

Q. Mr. Pinne, I wonder if you would step down from the stand and on the blackboard draw a diagram for the benefit of the court of the relationship you have in mind.

Mr. Lyon: Before he does that, may I have the answer to the last question?

Mr. Sellers: Will you please read it?

(Answer read.)

Q. (By Mr. Sellers): Would you like to draw on the blackboard, please, Mr. Pinne, if his Honor is willing, a showing of the relationship you have just described?

A. I am not a very good artist, but assuming that this [348] is an aggregate weigh box here and, of course, underneath the aggregate weigh box is a gathering hopper, under which the truck is placed to receive the material.

When you have a cement weigh box on the side, of course, your problem is getting in here. If you discharge that cement here while this aggregate is going down, this cement has a tendency to boil out the top of this against this dam of material here.

So to overcome that, you try and run a pipe down

(Testimony of Douglas E. Pinne.)

into this, and then the moisture accumulated around this actual pipe in here, to get away from this boiling action, becomes damp and the cement cakes on that and consequently you have got a restriction there.

Also, our plants are used, and everyone's plant is, practically, for not only ready-mix concrete, but dry batching. Dry batching is merely a dump truck with gates in the middle, and you put the aggregate and the sand and cement in there, and it is hauled, in our case to these freeways around here, and each batch is dumped onto the skip of the mixer on the grade.

In this type of operation, we change this gathering hopper here because of the fact that the dump truck is square, and if you dump it all in a pile in the center, it will run over the top of the batch truck, so you have to spread the material out, and as this cement comes down in this type weigh [349] box, it has a tendency to shoot clear over and get on one side and stick in the truck and blow away and all of that, rather than to ribbon in or to go in properly and get mixed with the sand and gravel. That is from the dry batch angle.

We have, of course, as I said, the problem of it boiling out here, rather than going into the aggregate properly on a ready-mix truck.

Mr. Sellers: If I may add, your Honor, he referred to a dump truck, which is a different type conveying truck than the ready-mix truck that we have been hearing about the last few days. The

(Testimony of Douglas E. Pinne.)

ready-mix truck receives the aggregate and is the type you have the rotating bin, whereas the dump truck——

Q. Well, will you explain that?

A. The dump truck, of course, as I said, has compartments in it with gates which trip one at a time on the cement mixer or on the grade for our freeways or any kind of a paving job where they have a mixer, and the water, the proper amount of water is added in the mixer on the job. It is hauled to the job in a dry form and the contractor is very desirous of getting that cement mixed into the aggregate and sand suspended within it, rather than on the bottom or top where it would stick to the bottom of the truck with the dampness of the material, or blow away were it on top of the truck.

Q. Let me ask you, Mr. Pinne, with the cement coming [350] down from the side as in the diagram you have drawn, would it not be a fact that much of that cement would be prevented from getting into the discharge by means of the shaft of aggregate and would go around and go up and out on all sides of the collector hopper?

A. That's right.

Q. And in the dry mix condition, that would be particularly important, wouldn't it, because you would have both dry aggregate and dry cement, substantially dry aggregate?

A. That's right.

Q. Have you, in standing and watching the operation of a side feed plant of this type—well, what can you tell us about what you have observed about the creation of clouds of cement or dust?

(Testimony of Douglas E. Pinne.)

Mr. Lyon: Your Honor, may I interpose an objection at this point that this is one particular type of plant, and there is no showing that this is the only type of side entry plant that was ever around, so I don't see the pertinency of the difficulty he has with this particular type.

We have had the other witnesses testify there were a number of these types available. I have been rather patient, but I don't see the purpose of it. It seems to me to be immaterial.

The Court: Overruled. You may answer.

Mr. Sellers: Will you read the question, [351] please?

(Question read.)

The Witness: Our problem with this type of plant is applying cement properly with the aggregate so that when it gets in this ready-mix truck, it will not go through there first and get into the ready-mix truck ahead of the aggregate, because when cement does, with the water that is already in there, we encounter trouble with the cement balling in the front of the mix.

The Court: You are still using that kind of batch plant, aren't you?

The Witness: Yes, sir.

The Court: In fact, from your testimony, about half of your batching plants are of that kind?

The Witness: Approximately that.

Q. (By Mr. Sellers): But do you run into the

(Testimony of Douglas E. Pinne.)

problem you have just described in these batching plants?

A. We are continuously overcoming one problem and another by changing and experimentation, and the fact that we have experienced batch operators there that are capable of controlling this valve in such a manner that we do not allow the cement to get in there ahead of the aggregate.

Q. Is it a fact that with this type of operation you find that you have greater cement clouds and dust clouds in the operation of the plant?

A. That today is our biggest problem, the air pollution. [352] We keep pretty busy keeping out of trouble with this type of plant as far as air pollution is concerned. That is our problem.

Q. Do I understand you to say with this type of plant you actually have an air pollution problem which is not present in the Johnson type plant?

A. Definitely.

Q. Thank you very much. Take the stand again, please. Now, you have stated you have less dust problem and air pollution problem with the center flow plant.

What, in your opinion, is the reason for that? Is it because in the central flow plant the cement is protected by the enclosing body or stream of aggregate, or what is the reason, in your opinion?

A. When the aggregate and the cement are dumped in simultaneously in this type of plant—

Q. Referring to Exhibit 14?

A. Yes. The flow being vertical and the mate-

(Testimony of Douglas E. Pinne.)

rial coming in from the two different sides tend to distribute that cement in a very uniform manner and, consequently, while it is allowed to flow out from that—the aggregate coming from both sides, you naturally don't have the restriction there that you do coming in from the sides of the aggregate.

Q. You mean the restriction of the cement?

A. That's right. [353]

Q. Do you have as a result less formation of air pollutants in this type of plant?

A. Definitely.

Q. That statement is based upon your personal observation of the plants under your control?

A. That's right.

Q. You have mentioned in a type of the side feed plant that you have, with the cement coming in from the side, if you extend the cement duct down far enough to get it into the stream of aggregate, you have a moisture problem present. Is that problem present to the same degree in the type of plant of Johnson, the Johnson type?

A. No, it is not, because the bottom of the cement weigh box in this type on this 14 does not actually reach down into the aggregate.

Q. You have also mentioned balling up. Is it not a fact that today—well, let's put it this way. What do you mean by balling up, Mr. Pinne?

A. The fact that there is aggregate underneath this before this gate is tripped retards the flow of that cement just enough until the aggregate gets started so that the cement does not get in the mixer

(Testimony of Douglas E. Pinne.)

first. It gets in there with the aggregate and keeps it from collecting in balls in any way, whereas with that type where the pipe is down below and those are turned on simultaneously, the cement gets a head start on [354] the aggregate and gets in there first, and there is always rinse water in a drum of a mixer, 10 or 15 gallons, whatever is required, and as that cement hits that water, it immediately becomes a ball, and it will stay that way until it is discharged from the mixer.

Q. Is that statement based upon your personal observation? A. It is.

Q. I believe you have pointed out to the court that in the filling of the dump trucks there is danger with the side feed type of cement that the cement will all go to one side of the dump truck, rather than to be intimately mixed as is desired.

A. That's right.

Q. That is something that occurs with regularity so that you have to be worried about it, is it?

A. It is just a case that we try to not run any dry batch trucks out of a plant with a side weigh box on it.

Q. However, are you perfectly free to run dry mixtures out of a plant of the Johnson type?

A. We are doing it presently, dry batch.

Q. Is it not also a fact that because of a development in the field of mixer trucks the mixing which takes place in the Johnson plant is particularly desirable, even more than it was years ago, and by that I mean has there not been a change [355] in

(Testimony of Douglas E. Pinne.)

mixer trucks from a top opening type to an end feeding type?

A. Formerly we had a hatch on the side of our drum and the drum was stationary while it was being charged. Consequently the cement and aggregate just automatically got mixed as it was dumped, as it were, in the inside of the mixer that was stationary, so it went into a pile down there and was naturally mixed right inside there, or blended together, may I say, before there was ever any mixing action from the mixer, but those are a thing of the past, and today we apply the sand and aggregate and cement to the rear of the mixer, and it is wound in, as we commonly call it, with the mixer rotating.

Consequently, it is very desirous—this is not my opinion, it is everyone's opinion—it is very desirous to get the equal amount of sand and cement and aggregate starting into that mixer from the minute the gate is open.

Mr. Lyon: Your Honor, may I suggest or move that we strike the portion of the answer which was not based upon his knowledge.

The Court: Denied.

Q. (By Mr. Sellers): Can you make any statement from your experience concerning the time required to effect satisfactory mixing of concrete from a Johnson type plant as compared to concrete from a side feeding type or some other type?

A. Mixing time has a great deal to do with the type of [356] a mix that is charged into the mixer. It is my belief this type of—this detail 14 here will

(Testimony of Douglas E. Pinne.)

properly mix the concrete in a shorter time than a different type of weigh batcher.

Q. Did I understand you to mean that the concrete from this type of plant could be processed more quickly in the mixing truck than concrete from another type of plant?

A. We are required to mix it a certain number of revolutions.

Q. I understand that in the City of Los Angeles we have city time requirements, that the law requires that we have the mixing take place for a certain range of time in the truck, is that correct?

A. That's right.

Q. Do those limitations of time, however, have any application for jobs other than city jobs?

A. We feel that——

The Court: That is not the question, what you feel or "we feel."

The Witness: May I have the question?

The Court: Read the question.

Mr. Sellers: Will you read it, Mr. Reporter?

(Question read.)

The witness: They have approximately the same limitations.

Q. (By Mr. Sellers): You mean for jobs other than city [357] jobs? A. That's right.

Q. How about jobs outside the County of Los Angeles? Are the city time requirements applicable there?

(Testimony of Douglas E. Pinne.)

A. There must be a certain length of time to properly mix that concrete.

Q. But is that required by law, that is what I meant? A. No, it is not.

Q. Then let me reword my first question, because I am afraid I did not make it clear. The City of Los Angeles has certain requirements by law, I understand, for certain city work, but how extensive is the application of those requirements?

Do you have jobs in which those time requirements are not applicable? A. Yes.

Q. I am sorry I confused you. Please explain that.

A. There is certain grades of concrete that are poured that don't need the strength that some types of jobs do. Consequently, if your job is close to the mixing plant and you can do a good job of applying the cement and aggregate into the mixer, you are able then to discharge it immediately on arrival at the job, rather than standing there and mixing it after you arrive on the job.

Q. Is it a fact that it has been your experience that [358] you can mix in less time where the concrete mix is of the Johnson plant type?

A. I can't answer that in the affirmative, because we don't have any job close enough that I have found any difference.

Q. Would it be your experience, however, that such would be the case?

The Court: When he says he doesn't know, how can he answer?

(Testimony of Douglas E. Pinne.)

Mr. Sellers: I wonder if the witness understood the question. Will you please read the question to the witness, Mr. Reporter?

The Court: Read the previous question.

Mr. Sellers: Yes, the preceding question, too.

(Record read.)

Q. (By Mr. Sellers): Did you understand the first question?

A. Yes. It is only natural if the cement and aggregate is applied in the proper manner in the mixer, you can mix it in less time to the proper consistency.

Q. That is the answer you intended to give to the first question? A. That's right.

Q. Now, I think we have confused the court a little bit, and also me. [359]

The Court: You haven't confused me. Go ahead. Don't worry about me. I am keeping up with you.

Mr. Sellers: Your Honor, believe me, I am only worried about you.

Q. Has it been your experience that where the mix truck is charged from a plant other than the Johnson type plant, that frequently when the mixture is delivered to the job, it may be necessary to be very careful that there is a complete mixture taking place?

A. I would not say frequently.

Q. It doesn't happen very often? A. No.

The Court: Not in your plant?

The Witness: No, sir.

(Testimony of Douglas E. Pinne.)

Q. (By Mr. Sellers): It is a fact, then, I take it—well, cancel that.

The Court: In all this operation there is a human element, isn't there?

The Witness: Yes, sir.

The Court: If you have good employees, you get good results. If you have poor employees, you get a poor result?

The Witness: Yes, that is for sure, yes, sir.

Mr. Sellers: Your Honor, I wonder if I might read into evidence a part of this book.

The Court: Well, now, we have got this witness on the [360] stand and I would like to get this witness off the stand by noon, if I could. Do you want to read the book so he can listen to it?

Mr. Sellers: I don't think so. That wasn't my purpose, honestly.

The Court: If you have got any other questions, let's proceed with the examination.

Mr. Sellers: My purpose was I hoped we might have him on the stand at the recess so that I could call him again after lunch and conclude at that time.

The Court: I am trying to get rid of the witness. Do you want to keep him until after lunch?

Mr. Sellers: Your honor, Mr. Denny here is my co-counsel from back in Wisconsin and I wonder if I might let him ask certain questions in this particular case.

The Court: As a general rule, only one counsel can inquire of a witness.

Mr. Sellers: I understand that, your Honor, but

(Testimony of Douglas E. Pinne.)

in this particular case we only came in contact with the witness just last night about 10:30, and we have not had adequate time, you might say, to prepare, and I wonder if co-counsel would object?

Mr. Lyon: Whatever is the court's desire.

The Court: Well, I object. I want to finish this case tomorrow. [361]

Mr. Sellers: So do we.

The Court: We have been going for several days now.

Q. (By Mr. Sellers): In connection with the operation of the plant, Mr. Pinne, does an increase in height increase operating costs?

A. Just initial costs.

Q. Just initial costs? A. Yes.

Q. The subsequent costs are not materially increased? A. That's right.

Q. Turning now to the operation of the discharge here, it has been testified that the aggregate upon dropping out of the aggregate hopper has a very slight drop, rather, a very slight arc.

Do you have an opinion based upon your experience as to the path of flow of the aggregates coming down the side walls of the aggregate hopper, and on their way down to the collecting hopper?

Mr. Lyon: I will object to that, your Honor.

The Court: Sustained. There is no foundation for that sort of an opinion from this witness.

Q. (By Mr. Sellers): Have you observed, Mr. Pinne——

The Court: Now, you are just trying to kill time

(Testimony of Douglas E. Pinne.)

so you can keep the witness on the stand, and if that is so, we will take our recess. [362]

Mr. Sellers: Well, your Honor, I certainly do not want you to think that we are wasting time. However, I would like to have him here at 2:00 o'clock.

The Court: Even though I felt you are wasting time, I wouldn't criticize you particularly for it, because it is something all lawyers do.

Mr. Sellers: Then I feel better.

The Court: If you want to keep control of the witness——

Mr. Sellers: I would appreciate the recess now, your Honor.

The Court: All right.

Mr. Sellers: Thank you very much.

The Court: We will now stand in recess until 2:00 o'clock this afternoon.

Mr. Sellers: Thank you.

(Thereupon, a recess was taken to 2:00 o'clock p.m.) [363]

Thursday, March 15, 1956—2:00 P.M.

The Clerk: C. S. Johnson vs. Merle W. Stromberg, et al., further trial.

The Court: Are you ready?

Mr. Lyon: Yes, your Honor.

Mr. Sellers: Just one or two more questions, your Honor.

DOUGLAS E. PINNE

the witness on the stand at the time of the recess, having been heretofore duly sworn, was examined and testified as follows:

Direct Examination

(Continued)

By Mr. Sellers:

Q. Mr. Pinne, approximately how many tons of aggregate and cement are there in a cubic yard of concrete?

A. Just a little less than two tons.

Q. And approximately how many tons of concrete does your company batch in an ordinary working day?

A. Ordinarily about 7,000 yards.

Q. Would it be correct to say that your company each working day lifts approximately 14,000 tons of aggregate and cement into storage bins of its concrete batching plants?

A. Approximately.

Q. You stated that you still have side feed plants in [364] operation in your company today, is that correct?

A. Yes, sir.

Q. About how long does a plant last?

A. With the proper care—Will you ask that question again, please?

Q. Yes. About how long does a batching plant last? Does it have a short life or a relatively long life?

A. A relatively long life.

Q. About how long?

A. 20 years.

(Testimony of Douglas E. Pinne.)

Q. Thank you. Were those side feed plants which you have today in your company and which are still operated plants which were purchased quite some time ago? A. Some of them.

The Court: May I ask a question?

Mr. Sellers: Certainly, your Honor.

The Court: Of these plants in 1948 that were operating and where the cement container was in the center, were those of recent construction or old construction?

The Witness: What year?

The Court: In 1948.

The Witness: In 1948, they were of recent construction, sir.

The Court: Had they been constructed in the previous two or three years? [365]

The Witness: That's right, yes, sir.

Q. (By Mr. Sellers): You have the power today to purchase plants for your company, I believe you said. A. Yes, sir.

Q. And if you were purchasing a plant today, would you purchase a side feed plant or a central feed plant?

Mr. Lyon: I will object to that, your Honor. That is just speculation.

The Court: Overruled. All other things being equal, prices being equal.

Mr. Sellers: All right, prices being equal. Thank you, your Honor.

The Witness: The center feed plant.

(Testimony of Douglas E. Pinne.)

Mr. Sellers: Thank you. Your witness, Mr. Lyon.

Cross-Examination

By Mr. Lyon:

Q. How many different types of batching plants do you have under your control, sir?

A. How many different types?

Q. Makes.

A. Makes? I will have to trust to memory on that, if you don't mind, by the telephone directory. Approximately six.

Q. Do you have any idea how many different types of [366] plants are available on the market at the present time? A. No.

Q. Have you ever used a Noble plant in your operation? A. Yes, sir.

Q. Was the plant you referred to in 1940 which is, I believe you said, one that fed the cement from the center into the aggregate, was that a Noble plant? A. What plant was that?

Q. The plant you referred to on direct examination which was available in 1940. A. Yes.

Q. That was a Noble plant? A. Yes.

Q. When did you first acquire a C. S. Johnson plant of the type in suit?

The Court: You mean Johnson or Johnson type?

Mr. Lyon: Let me rephrase the question.

Q. Showing you now the patent in suit, how many plants of this type made by the C. S. Johnson Company do you have at the present time?

(Testimony of Douglas E. Pinne.)

A. Four.

Q. Four. How many plants do you have total at the present time? A. 23.

Q. When you testified that you felt that you received [367] certain advantages from the type of plant where the cement was discharged centrally of the aggregate as it flowed into your mixer, did you have only this particular Johnson plant in mind, or do you have other plants which will accomplish that result? A. Are you asking me——

Mr. Lyon: Would you read the question again, please?

The Court: Read the question.

(Question read.)

The Witness: I will have to answer that question in two parts.

Q. (By Mr. Lyon): Go ahead.

A. I feel that the Johnson plant had its advantages, and I also had in mind the other type plant.

Q. The Noble type plant?

A. That's right.

Q. What is the difference between the Noble type plant and the Johnson type plant?

A. They are completely different except for the position of the cement.

Q. The position of the cement in the aggregate hopper is identical, is it not?

A. The position is identical.

Q. The only difference, then, between the Noble type plant and the Johnson type plant lies in [368]

(Testimony of Douglas E. Pinne.)

what? A. In the separate weigh batcher.

Q. In other words, the difference is that in the Johnson plant both the aggregate and the cement hoppers are suspended from their own independent scales, while in the Noble type plant a single scale supports both of those?

A. And positioned differently.

Q. How are they positioned differently, sir?

A. Due to the type of weigh box they have to be positioned differently.

Q. I don't understand what you mean by positioned differently. You mean the hoppers inside of each other are different? A. Yes, sir.

Q. How are they different?

A. The cement weigh box in a Noble plant is lower than the cement weigh box in a Johnson plant.

Q. So that the discharge of the cement hopper and the discharge of the aggregate hopper are closer together, is that correct?

A. That's right.

Q. What is the distance between the two?

Mr. Sellers: May I interrupt to ask if your purpose is to establish the anticipation, Mr. Lyon, or merely to establish that the witness knew about this other type of plant and could have [369] purchased it?

There is no evidence whatever that the Noble type plant has a date sufficiently early to be an anticipation.

Mr. Lyon: What I am trying to prove, your

(Testimony of Douglas E. Pinne.)

Honor, is that this man's testimony is not related to this patent in suit, but related to a general type of plant, not this specific plant.

The Court: There is no objection. Go ahead.

Q. (By Mr. Lyon): Now, would you answer the question?

A. May I have the question again?

Mr. Lyon: Will you please read it?

(Question read.)

Q. (By Mr. Lyon): Speaking of the discharges in the Noble type of plant.

Mr. Sellers: I think I will object to that, your Honor.

The Court: Overruled.

The Witness: I cannot answer that in any specific answer. I do know that the Noble plant weigh box hangs much lower than the Johnson weigh box.

Q. Do you get any different result insofar as inter-mixing, pre-shrinkage, or avoidance of balling up between the Johnson plant and the Noble plant?

A. Yes.

Q. What is that difference?

A. The difference is in the fact that the cement is closer to the discharge point.

Q. So, in other words, in order to avoid the difficulties [370] that you were discussing that you got out of this side entry type, the critical thing there is to get those two discharges in the appropriate relationship with one another?

A. That's right.

(Testimony of Douglas E. Pinne.)

Q. If your plant does not have the discharges related within a given range, then you don't get these results, is that correct?

A. That's right.

Q. Now, in the operation of a batching plant, the operator can, if he so desires, put all of the aggregate into your mix truck first and then add all the cement, is that correct? Any type of plant?

A. I don't follow you.

Q. Let's say we have got a bin with cement in it and a bin with aggregate in it. If the operator desires, he can open the discharge for the aggregate and dump all of that into the mixer without touching the cement? A. Not every plant.

Q. Not every plant? A. No.

Q. What type plant can't do that?

A. Any plant that is interlocked, it is not possible.

Q. It is practice to interlock these plants?

A. positively.

Q. So the contractor would designate that he wanted the [371] hoppers interlocked. I believe your answer was that the State of California requires that. A. Right.

Q. If the mixer truck is overloaded by the operator of the batching apparatus, what is the result?

A. What is the result?

Q. Yes.

A. Dump the load and bring it back and give the proper load.

Q. What is the result on the concrete mixed?

(Testimony of Douglas E. Pinne.)

It is no good? A. That's right.

Q. So that if the operator happened to put an extra half yard or extra yard of cement into the mixer, the material is substantially wasted?

A. That's right.

Q. When you get complaints, as you undoubtedly do, from contractors, do you find that that is one of the causes of the complaints that your concrete was not adequately mixed?

A. In the past we have. We have tried to correct that in recent years.

Q. That, however, is a problem under the control of the truck mixer or of the batching operator?

A. Under the control of the batch operator, and the plant itself. [372]

Q. Referring to this little diagram you have sketched on the blackboard, is that the only kind of side operated plant you have ever had?

A. The only kind?

Q. Yes. A. The only type.

Q. That you have had any association with?

A. Yes.

Q. Have you ever had any association with a plant wherein the discharge from the cement hopper pierces the aggregate hopper and spills down the inside? A. Yes.

Q. Is that what you would call one of the centrally discharged or concentric discharge plants?

A. I wouldn't call it that, no.

Q. Do you obtain any different mixing with one that operates in that way?

(Testimony of Douglas E. Pinne.)

A. A better mix than the other kind.

Q. A better mix than this kind? A. Yes.

Q. How does it compare with the type of plant we are talking about in the Johnson patent?

A. It comes as close to comparing with this type, if you are able to get your discharge in the proper position down here in that type. [373]

Q. It would get the identical result, would it?

A. I wouldn't say that, no.

Q. Well, if you get your discharge in the proper point, you will get as closely as possible a pre-mix, a pre-shrinkage?

A. No. It is an entirely different type discharge then, so you have force behind it. You are screwing it out there rather than dropping it of its own free will.

Q. You testified that in the operation of the Johnson type plant you had less of a dust problem than you do with this side operated plant, is that correct? A. That's right.

Q. In the Noble type plant, do you have the same curing of the dust problem that you have in the Johnson plant?

A. We have a little more dust problem in the Noble plant.

Q. In all of these plants you do have dust, do you not? A. A slight amount.

Mr. Lyon: I think that's all. Your witness, Mr. Sellers.

Mr. Sellers: Just one question.

(Testimony of Douglas E. Pinne.)

Redirect Examination

By Mr. Sellers:

Q. I believe it was stated on cross-examination that in [374] the side feed type of plant, Mr. Pinne, that you might improve its operation if you extended the feed for the cement way down to the bottom here in an extended line so that it almost approximated the line of passage of the aggregate?

A. That is what we attempted to do.

Q. If you do though, is it a fact or is it not a fact that you tend to have difficulty with the moisture through clogging?

A. That's right.

Mr. Sellers: That's all.

The Court: May this witness be excused?

Mr. Sellers: Yes.

The Court: He may be excused.

Mr. Sellers: May he leave, your Honor?

The Court: Yes. He is excused.

Mr. Sellers: Thank you.

(Witness excused.)

Mr. Sellers: I believe, your Honor, that in just a minute we will rest our prima facie.

We do rest, your Honor, the prima facie case.

The Court: Call your first witness.

Mr. Lyon: Mr Wisniski, will you take the stand, please? [375]

WILLIAM H. WISNISKI

called as a witness by and on behalf of the defendants, having been first duly sworn, was examined and testified as follows:

The Clerk: You may be seated, and state your name.

The Witness: William H. Wisniski.

The Clerk: Will you spell it, please?

The Witness: W-i-s-n-i-s-k-i.

Direct Examination

By Mr. Lyon:

Q. What is your present occupation, Mr. Wisniski?

A. Engineer for the W. E. Kier Construction Company.

Q. That is a Los Angeles concern?

A. Yes, sir, El Segundo.

Q. Would you state your education, Mr. Wisniski?

A. I have a B.S. in chemical engineering from Washington State College.

Q. When did you receive that degree, sir?

A. 1935.

Q. Upon graduation from Washington State College, where did you go to work?

A. I went to the work for the Bureau of Reclamation at Coulee Dam, Washington.

Q. That is the federal government, Department of Commerce? [376]

(Testimony of William H. Wisniski.)

A. Federal government, Department of the Interior.

Q. Department of the Interior, Bureau of Reclamation?
A. Yes.

Q. That was at the Grand Coulee Dam?

A. Yes, sir.

Q. What was your job there?

A. Initially I worked as a civil engineer on surveys for a small period and the rest of the time was as a concrete engineer.

Q. What are the duties of a concrete engineer, sir?

A. The concrete engineer at Coulee Dam, the concrete control department, in which I worked, had the responsibility of inspection of all the concrete that went into Grand Coulee Dam and the design of this concrete, the inspection of all the ingredients that went into the concrete, and, oh, also field work in aggregate investigations.

Q. Did you have any connection with the mechanical devices by which the concrete was mixed and prepared?

A. Yes. I spent considerable periods in the actual plants at Grand Coulee Dam during that period and also in the laboratory.

Q. In the laboratory work you would determine what kind of a mix you desired for a specific job on the dam?

A. Yes, sir. We had numerous different mixes that went [377] into the dam proper. We had to design it for maximum economy and strength, quality

(Testimony of William H. Wisniski.)

in all respects, and we had considerable work in, oh, in concrete control you try to maintain the quality and uniformity of the concrete through various tests at all times. It is checked continuously.

Q. Do I understand it correctly, then, that in building a dam or a structure of that size, you use one different type of mix of concrete under some situations and a different type in a different situation?

A. That's right. In a dam they use a lot of what you call mass concrete or concrete that goes in the bulk of the structure where it is not restricted by reinforcing steel or small forms, and in that place we use what you call six-inch maximum aggregate or cobbles, and that went into six through on its smallest dimensions, and at places where you had reinforcing steel or forms of restricted nature, you used the smaller size rock, all the way down to $\frac{3}{4}$ inch maximum.

In some, oh, minor cases, where it might go down to $\frac{3}{8}$ inch maximum, and then you go down to grout or sand and cement and water mixture alone.

Q. During your stay at the Grand Coulee Dam, what type of batching apparatus was used to prepare the concrete?

A. It was the Johnson—they had two Johnson plants for the bulk of the construction. They are large plants of, oh, the last plant was a dual 4-4 yard mixer plants together. [378]

Q. The design of those plants is different from

(Testimony of William H. Wisniski.)

the design of the patent in suit here which I will show you in just a moment, is that correct?

A. It is much different. The big plants have a separate batcher for each ingredient. For each size of gravel, for instance, there is a separate batcher. At Grand Coulee, for instance, as in the case of many of the larger dams, we had one size of gravel, 3 to 6 inch, that was the larger size, and another batcher for 3 inch to inch and a half, and another batcher for inch and a half to $\frac{3}{4}$, one for sand, one for cement, and then a water batcher.

Q. How long were you with the Federal Bureau of Reclamation on this Grand Coulee?

A. I worked there from July, 1935, until October, 1941, at which time I went into the armed forces during the war.

Q. What was your job in the armed forces during the war?

A. I had a number of positions. The final and the highest position I had was commander of an engineer combat battalion.

Q. During which time you handled some of the cement construction work that the Army was doing?

A. Yes. We had all miscellaneous field construction during the war in this country and overseas.

Q. After you left the service, where did you go? [379]

A. I went back to Grand Coulee Dam for a short time, about three months, and then into the——

Q. You were again with the Federal Bureau of Reclamation?

(Testimony of William H. Wisniski.)

A. Yes, back to the Federal Bureau of Reclamation. I was just on leave during the war.

Q. After you left Grand Coulee Dam, what was your next work?

A. I was still with the Bureau of Reclamation. I went into the Columbia Basin, which is adjacent to or a part of this Coulee Dam or Columbia Basin Project, the irrigation end of it. I spent a year at Pasco, Washington, on the construction of a pumping plant in the lateral system for that project there, and then I spent a year at Ephrata, Washington. That is the headquarters of the Columbia Basin Project.

Q. For the Federal Bureau of Reclamation?

A. For the Federal Bureau of Reclamation.

Q. During those two years, I think that is 1947 and 1948, did you have contact with batching equipment?

A. Yes, considerable experience at Pasco, and on this one project itself we had two different contractors with separate batching plants. I was concrete engineer on that project, and we supervised, controlled the concrete for that entire subdivision.

At Ephrata, I was the assistant concrete engineer [380] for the whole area which comprised, oh, the Columbia Basin Project itself involved the irrigation of over a million acres of land, so it extends for about 150 miles north and south, and there was numerous contracts going on in this area. There were dams under construction, tunnels, siphons, pumping plants.

(Testimony of William H. Wisniski.)

Q. In all of this work you were closely associated with cement batching and the batching apparatus, is that correct? A. Yes, sir.

Q. Was it your job to supervise this equipment and suggest when they were being improperly used?

A. Not so much the actual supervision as it was the inspection. On all the government work before a contractor begins operations, he must have approval of his equipment before he can operate it and produce concrete for a certain government job. One of my duties in all of this work was to check over the plants and approve or disapprove them, and show them where they could be improved and make them conform to our minimum requirements, and during the actual operation of this equipment, if there was anything faulty in the manner in which they worked, we forced them to change it so they would get desirable results.

Q. So you were constantly analyzing the output of the batching equipment?

A. Yes, in every manner. I constantly, either myself [381] or supervised test work or the observations necessary to get the specification concrete.

Q. Observing these plants actually in operation?

A. Yes, sir.

Q. To see that they were being run correctly?

A. Yes.

Q. After you left this post with the federal bureau, where did you go next?

A. I was still with the Bureau of Reclamation. I went to Canyon Ferry Dam in Montana. I was con-

(Testimony of William H. Wisniski.)

crete engineer on this dam. It is a dam on the Missouri River near Helena, Montana. I spent approximately five years on this project as concrete engineer.

Q. During that time your duties were similar to those you have outlined?

A. Similar to what I have mentioned. I was concrete control engineer, had charge of concrete control section which had full authority over the inspection and control of the concrete for the dam.

Q. Now, in August, 1953, you left the Bureau of Reclamation, is that correct?

A. I left the Bureau of Reclamation in August, 1953, and went to work for a joint venture of Kier Construction Company, who I am now with, and Daniel, Mann, Johnson & Mendenhall, architects and engineers of Los Angeles, who had a [382] contract with the Indian government for consulting and preparing the master construction plan for Rihand Dam.

Q. Did this particular job require you to leave the country?

A. Yes. We spent approximately eight months in India.

Q. Teaching the Indians how to make one of these dams, is that correct?

A. Yes, sir. Our job involved preparing the master construction plan, which was the design of the entire construction scheme for the building of this dam, the design of the major equipment, layout of numerous items, such as plants, cable ways,

(Testimony of William H. Wisniski.)

bridges, town sites, roads, everything imaginable, including health and sanitation, so it was quite complete and we were available at all times to the Indian government engineers on a consulting basis, and I was consulted, or they consulted us on very many items.

Q. Would they also consult you regarding concrete problems?

A. Yes. That was one of my big jobs, by no means all of it, but I had full responsibility for answering all questions on concrete and the concrete plant in general, the placement and manufacture, both.

Q. Now, upon your return from India, what was your next occupation?

A. I went to work for the Colorado Pre-Mix Concrete [383] Company, Denver, Colorado, with the main responsibility of promoting, developing and installing moisture meters that test the moisture content of concrete aggregates.

Q. Would those meters be placed on a batching plant?

A. Yes. They are designed largely for use in the sand batcher, electrodes actually installed in the sand batcher, and also can be installed in a gravel, especially the finer gravel batcher, and they are used to determine the moisture content of particularly the sand.

Q. What did you do with the information after you determined what moisture was in the sand? I mean what does that control?

(Testimony of William H. Wisniski.)

A. The moisture in the sand is a very critical item in concrete manufacture, because it varies so much. There are some sands will hold 12 or more per cent moisture, and that same sand can dry out to maybe 2 per cent or thereabouts, any percentage in between, and you take 10 per cent, say it is 10 per cent sand moisture of a batch of sand, say it is 1,000 pounds of sand, that is 100 pounds of water, and the water that is in the sand will greatly influence the consistency of the concrete or how fluid it is, and thereby, also, influence the critical item of water-cement ratio or the ratio of the water in relation to the cement, which has great bearing on the strength and durability of the same concrete.

Q. So that these materials would indicate the amount of [384] water present in the aggregate and from that you would deduce that you needed less water or more water in the batch as it was discharged?

A. Well, if you visualize a typical situation, the operator is batching material and he sees the sand moisture content jump from, say, 5 per cent to 10 per cent, and say he has got a thousand pound batch of sand, so he knows there is 50 pounds more water being introduced into this batch by the moisture in the sand, and so from his added water he has to cut 50 pounds of water and has to add a corresponding amount of sand.

Q. The most critical factor, then, in batching concrete correctly is to control the amount of water

(Testimony of William H. Wisniski.)

that is put in with respect to the amount of sand, is that correct?

A. That is very critical. That water-cement ratio is generally a specified figure, and any time that you exceed your specified figure, your concrete strength is reduced accordingly.

Q. And the apparatus by which the cement is mixed or batched has no bearing on that whatsoever. If the waterer doesn't get the water-cement ratio correct, he is not going to get a correct batch?

A. It is generally to do with what you actually put in the batch. You can't mix it out in any manner if you introduce your ingredients in the wrong proportions. If you add [385] too much water, you have got it in there and you have to mix it up.

Q. At this time did you have under your supervision or control or observation any of the plants of the type illustrated in Johnson patent No. 2,138,172?

A. Yes. During this time I toured the United States. I made installations in plants all over the United States and I observed many more plants. One part of my duties in this job in connection with my work was to try to promote concrete quality and to more or less operate as a consultant with everybody that we possibly could deal with in trying to promote our product, and before we could really promote our moisture meter, we many times had to teach the basic fundamentals of concrete manufacture and control to many people.

The concrete industry in general in the United

(Testimony of William H. Wisniski.)

States is not in too good a state as far as quality of concrete is concerned.

Q. After you left this job, what was your next occupation?

A. I went to work as an engineer for the Kansas City Quarries Company in Kansas City, Missouri.

Q. What were your duties there?

A. I was general manager for the plant. Their main business was concrete, transit-mix concrete, and they also had precasting operations and did their own plant construction [386] and had their own quarries and so forth.

Q. When you mention transit-mix concrete business, by that do you mean that they would have a batching apparatus and people would come in and would have mixers, and you would take the cement out and sell it to them at a particular job?

A. They had two types. They had what we call dry and wet plants. They had a couple of premix plants where they would batch the concrete and actually mix it up and deliver from the mixer into a transit mixer, more or less as an agitator in this case. It would transport it to the job and deposit it where necessary.

They also had plants they called dry plants where the material is batched unmixed directly into the transit-mix trucks and the truck does all the mixing in that case, and conveying to the job.

Q. Did you use any of the Johnson type plants shown to you in that operation?

A. Yes, they had that plant.

(Testimony of William H. Wisniski.)

Q. After you left the Kansas City outfit, you came to your present occupation, is that correct?

A. Yes.

Q. What do your duties at the present time involve?

A. I am the general engineer for the W. E. Kier Construction Company. It involves a variety of work, all aspects of engineering. We have a lot—well, it will depend largely [387] on the job actually going on at the time. At present we have a dam at Blythe, California, on the Colorado River which we are just in the preparatory stages of construction on.

We have a job at Compton on storm sewers and a job at Santa Ana.

Q. Your primary occupation, however, is still dealing with concrete?

A. I have full responsibility of that item, plus other items like, oh, for the Blythe job I will be responsible for the selection of the proper plant to do the job. I will be responsible for the materials and the plants necessary to produce the aggregate, and also during the operations will be responsible that those plants are producing in the manner they are supposed to.

The Court: When did you say you started to work at the Grand Coulee Dam first?

The Witness: 1935, July, 1935.

Q. (By Mr. Lyon): When aggregate, sand and cement are placed in a mixing truck, what order

(Testimony of William H. Wisniski.)

must they be placed in to avoid balling up of the cement?

A. The big thing you strive for in putting concrete in a mixer, regardless of the type, is to try to, oh, avoid cement coming in contact, and the sand, also, for that matter, coming into contact with the bare metal of the mixer alone, because it is apt to, oh, maybe stick to the blades, especially [388] the back end or the end that is discharging into, and you try to distribute the time the ingredients go in so that there is no concentration of any one item at one end of the mixer or the other. For instance, you don't want all the sand in the back end of the mixer and all the gravel and cement in the other end of the mixer, and the water all at one end, and so forth. You time the entry of these ingredients so that they are more or less distributed through the mixer as evenly as possible.

Q. Now, it is possible to make satisfactory concrete, is it not, by putting first the rock from one hopper into the mixer and going on to the next and putting in sand and going on to the third and putting in cement, and so forth?

A. I might say that actually in the United States there is quite a variety of ways in which concrete people operate. I will say that I have had this experience in traveling the entire United States where I got quite a bird's eye view of what went on.

There is operations, for instance, where they actually do what you just described. They will have hoppers actually separated far enough that they

(Testimony of William H. Wisniski.)

will have to run a mixer along a string of hoppers and discharge each one of the ingredients separately, and particularly with cement, for instance, there is a number of towns, take our nation's capital, Washington, D. C., there it seems to be that the bulk of the [389] concrete is mixed in this manner.

Another place where the entire town seemed to be standard with it is Pittsburgh, Pennsylvania, where they feel they have got so far to go with their concrete that they will charge their sand and the rock from their batching plant into a mixer, and then into a dead mixer they will charge the cement dry on top of the sand and the gravel, and it is laying there in a layer. Then they will go out to their job, or shortly before they get there they will start mixing and add their water, so the cement is added entirely different, not together at all. It is just laying on top of the rest of the material.

Q. You do get a satisfactory concrete by that method?

A. Well, Washington, D. C., claims it has got good concrete and it has pretty good inspection in many cases.

In Pittsburgh, Pennsylvania, the state is fairly tight in its specifications.

Q. How do their specifications compare with the specifications, say of the City of Los Angeles?

A. Oh, I would say very similar. I haven't studied them all in too great detail. I can't really say.

Q. So that the only thing you have lost by doing

(Testimony of William H. Wisniski.)

it this way, I take it, then, is the time of running the mixer?

Mr. Sellers: I object to that as a very leading question, your Honor. [390]

The Court: Overruled.

Q. (By Mr. Lyon): Will you answer, please?

A. Well, with any mixer, very often, the mixing time is of consequence because the more that you turn your drum over, the more you wear that mixer out, for one thing, and the more energy you take to mix the concrete. In most cases in-transit mix, time itself isn't of too much essence, because the mixer has to travel to the job, and many times he may be traveling over a period of up to a half hour or so, and he has got plenty of time to mix that while he is traveling prior to the time he gets to the job, but you get a big job, like a dam, for instance, like the Grand Coulee, for instance, and the timing on these mixers was down to practically split seconds. They tried to squeeze every ounce of concrete they could out of the plant most times because they were the bottleneck in the concrete placement operation. They could take the concrete faster than the plant could put it out, so mixing time was of considerable essence at that time.

Q. Now, taking a second step from the individual stops of the hopper that puts the aggregate in the hopper, that puts the sand in the hopper, that puts the cement in the hopper, if you bring those three into sufficiently close relationship, stick the gathering hopper underneath, and funnel all of that

(Testimony of William H. Wisniski.)

in your mixer, do you obtain any different result than you would otherwise? [391]

A. Not measurable that I have been able to measure. I have worked with both plants, oh, like the Johnson plant, for instance, where you have individual batchers, generally in a circle around the gathering hopper, and they all come down to a common point and funnel into a mixer, in this type here in question, and in a number of other plants have made tests on mixer efficiency, and I could never measure any particular difference.

The big item that really made a difference was the way the charging was timed. That was of great consequence.

Q. But the mere physical location of the various ingredients with respect to one another as they go into a gathering hopper, does it perform any real difference?

A. Not that I could measure. There are other factors that may come in there like stuff hanging on the chute, for instance, or, like I mentioned before, of putting down cement in advance or late all by itself, and hanging up on the blades, or the back end of the mixer.

Q. You do, in your gathering hopper, when you put converging streams, get a mixing action, don't you?

A. I wouldn't say there was too much of a mixing action. I don't know exactly what you mean. You get a mixing action when you have got a——

(Testimony of William H. Wisniski.)

Q. You have got to have something moving sideways, don't you? Now, if you take this device shown in the Robb [392] patent, 1,750,244, there are the three hoppers, and there is a gathering hopper, and as those streams dump into that gathering hopper, you do get a mixing action, do you not?

A. Well, to a very minor extent, I would say. To get a mixing, you have got to have a folding and a refolding, and an actual churning of material. Just to bring material adjacent, to say that they were mixed—well, in this particular picture, you have got three streams of material. Well, you would visualize them coming down side by side with another one coming down the middle, and how much opportunity there is for the actual material to fold over itself, and how many times it would fold is, oh, I would say it is pretty hard to visualize what mixing action you get. It is very little. Maybe with two or three streams together, you get a possible interlinking right in the exact plane of contact, but I wouldn't say there was any general mixing in that.

Q. So that that mixing, whatever it is, that takes place is of no consequence in running your truck mixer, and so forth?

A. Not that I have been able to detect.

Q. Well, let's take these three hoppers in this Robb patent and bring them closer together so that the three streams will intersect as they discharge. Will you get any appreciable amount of mixing that will make any difference in the formation of concrete out of that action? [393]

(Testimony of William H. Wisniski.)

A. I can't see where that bringing them together would make any difference.

Q. Even if they do happen to hit each other or intersect, or what have you, on the way down?

A. There again you have got the same case I described before.

Q. Their mixing action there is no different than the mixing action that would take place in the gathering hopper if they were further apart?

A. No. They would meet at a common point. They have to meet there.

Q. And they have to reduce the circumference or diameter of the shaft and go down the smaller shaft, and you would have to get your mixing at that point?

A. They would have to have some way that they would fold and refold before you would get any real mixing in any case.

Q. I agree with you, that you can't take any of the so-called mix out at that point and have it concrete. It has got to be further mixed. My question is directed to whether this partial mixing, or what have you, that takes place at that point, is that of any consequence in the making of concrete?

A. About the only thing that you could probably accomplish there, that you try to accomplish, is to so co-ordinate the flow of that cement so that you wouldn't get your cement [394] falling on either the gathering hopper or into the mixer itself by itself.

Q. In other words, that disposition permits you to start your aggregate flow first, put your cement

(Testimony of William H. Wisniski.)

so it will flow on top of the aggregate constantly and keep it out of contact with the metal of your gathering hopper or of your mixing truck?

A. As long as you don't let the cement down alone.

Q. Too fast.

A. Too fast or too late. It would be the same condition.

The Court: Too late?

The Witness: You wouldn't want the cement to go in by itself after all the other ingredients.

The Court: But, however, how about putting the cement on top?

The Witness: Well, that situation that I described isn't the best practice. They do get some building up of cement on the blades, I think, more than you would if you partially fed that cement in with the rest of the ingredients.

The best mixer efficiency, I think, is to, I am sure, is to try to distribute your materials and time them so that they will go into the mixer together.

Q. (By Mr. Lyon): In other words, that will render the operation of the mixing truck more efficient, is that correct? [395] I mean if you put them in in the ideal sequence, you might avoid the building up of cement on your blades so that your mixer will do a more efficient job?

A. Yes, and probably with a better dispersion of materials, you probably wouldn't have to mix as long.

Q. In your experience with Johnson type plants,

(Testimony of William H. Wisniski.)

can you state whether or not there is any mixing of the concrete and the aggregate of an appreciable nature at the discharge of the aggregate hopper?

A. I wouldn't say that it is appreciable. If there is any mixing there, that is purely a hypothetical case. It would be very difficult to measure any mixing there. You can't see it to try to visualize it, what the situation is. You can't visualize any appreciable amount of mixing taking place there, because, as I described before, you don't get that folding or re-folding or actual churning of any material there to any great extent.

Q. So any discussion on any mixing at this point is pure speculation, in your opinion?

A. I would say it is.

Q. Do you know any way of testing that or finding out whether or not there is any mixing at that point?

A. One way you could test out this theory of whether there is any appreciable amount of mixing or shrinkage there is to set up two plants, one of this type and another of another [396] type, side by side, for instance, and have them charge, say a transit-mixer or a mixer—this same mixer, and with the same number of mixer revolutions, and then make mixer efficiency tests of both plants to see whether you had any improvement in your mixing condition.

Q. Do you believe that this operation I showed you here in this Robb patent would produce as much

(Testimony of William H. Wisniski.)

premixing or preshrinkage of this cement as this plant would, or can you tell?

A. Well, without running that elaborate experiment with two plants with the same mixer and same controlled mixing time, I wouldn't say.

I have had experience with both plants and made mixer efficiency tests of both plants and produced satisfactory concrete in those plants, various kinds of plants, and as far as I can see there is no appreciable difference in any of them.

Q. In other words, in the absence of tests establishing results one way or the other, you don't believe it is possible to ascertain from looking at those drawings whether or not there is any appreciable amount of pre-mixing taking place in either one of them?

A. I can't say by just looking at the prints that I could say there was any appreciable amount of pre-mixing.

Q. There would have to be an actual physical test made to establish that as a fact before you would be willing to accept [397] that?

A. That is correct. Take on actual specified mixing time in revolutions of mixers, and so forth, which many specifications specify, I don't recall ever seeing any place where they implied that the type of plant made any difference in the number of revolutions of a mixer that it took to produce what they termed as satisfactory concrete.

Q. In other words, the specifications as written up either by the government or by contractors al-

(Testimony of William H. Wisniski.)

ways call for the batch to be mixed a certain number of revolutions in the mixer before it was accepted? A. Yes.

Q. Irrespective of the plant it came out of.

A. They would have certain restrictions on the plant. The scales had to weigh to certain tolerances, and the water had to be batched with tolerances, and probably in some certain manner that they specify.

The Court: Counsel, can I ask this witness a question?

Mr. Lyon: Certainly, your Honor.

The Court: You are familiar with the Johnson plant, aren't you?

The Witness: Yes, sir.

The Court: When did you first become acquainted with it?

The Witness: Well, the first Johnson plant, the big Johnson plant—— [398]

The Court: Johnson type.

Mr. Lyon: This type right here, Mr. Wisniski.

The Witness: Well, naturally concrete is accepted more or less as my work through my whole life, and from the time I started at Coulee Dam. I visited every possible plant that I could in practically every city that I was around or any time I had the opportunity, I would visit various plants.

The Court: I know, but you started on the Grand Coulee Dam in 1935?

The Witness: Yes.

(Testimony of William H. Wisniski.)

The Court: Was there any of the Johnson type plants used on the Grand Coulee?

The Witness: Not this type, just the big plant.

The Court: When did you first come in contact with this type?

The Witness: It is probably—let's see. It was after the war, I think, before I really was in contact with one of the plants.

The Court: All right. Let's get this straight now. After the war, you say. That doesn't mean anything. What is the year?

The Witness: Probably 1946.

The Court: All right.

Q. (By Mr. Lyon): In the building of a batching plant, is there any appreciable result obtained by virtue of separately [399] weighing the aggregate and the cement?

A. As far as the mixing action is concerned, there is no great advantage in weighing them separate. That has nothing to do with the mixing action actually, but it has for accuracy of weighing. Cement, naturally, is more costly than the other ingredients, and you try to weigh it with as great accuracy as you can. Naturally, you want to supply the minimum amount of cement without question, and you don't want to overload, so you try to weigh it to the greatest accuracy possible. If you weigh it along with the other ingredients on the same scale, you get a much greater weight that you have to weigh and the graduations of your scale are much further apart, so you can't possibly weigh to

(Testimony of William H. Wisniski.)

nearly the accuracy that you can by separating the cement in a special weighing mechanism and weighing it by itself.

The Court: When did you first come in contact with a mechanism whereby the cement was weighed separately?

The Witness: Well, that was 1935, was the first time there.

The Court: In 1935?

The Witness: Yes, sir, on Grand Coulee Dam.

The Court: You weighed the cement separately?

The Witness: Yes, sir. Each and every ingredient was weighed separately.

The Court: All right. [400]

Q. (By Mr. Lyon): Do you obtain any result by weighing the cement in a hopper by one set of scales within a second hopper supported on a second set of scales which contains the aggregate? Do you get any more accurate weighing?

The Court: Let's have that question.

Mr. Lyon: Would you read the question, please?

(Question read.)

Mr. Sellers: I would like to object to that, your Honor. I don't believe the record shows he has ever operated a plant of that type and ever weighed them, to know.

The Court: Well, let's find out. Have you ever operated a plant like that?

The Witness: I actually have. I have never

(Testimony of William H. Wisniski.)

worked as an operator. I generally have had a job of much higher standing than that.

The Court: Have you observed and watched the weighing?

The Witness: Oh, yes, sir.

The Court: When did you first run into that sort of a procedure?

The Witness: Of what, sir?

The Court: Of weighing the cement inside of a hopper in which the aggregates were weighed.

The Witness: You mean similar to this picture here?

The Court: Yes.

The Witness: That was probably 1947. [401]

The Court: 1947. All right.

Q. (By Mr. Lyon): That was part of your job in those days to inspect plants of this type, and see that they were operated correctly, is that right?

A. Yes, and many times we would actually operate them. As an inspector, I have put in many hours actually operating the plants. I actually operated this plant, not as an operator, but I pinch hit as an operator on rare instances in Kansas City. I know that.

The Court: All right. Now you can answer the question.

Mr. Lyon: Could we read the question again so that the witness will know what it is?

The Court: Could you read Mr. Lyon's question again?

(Question re-read.)

(Testimony of William H. Wisniski.)

The Witness: Well, as I interpret that question, you have reference just to the position of the actual weighing apparatus. Well, regardless of where you put that weighing apparatus, you could have it in the middle or you could have it a half block away, and it is entirely dependent on the accuracy of the equipment itself in the nature of its construction, what accuracy in weighing you get.

Q. (By Mr. Lyon): It is still going to do no more than just weigh the cement and weigh the aggregate, isn't that correct, whether one is within the other or they are a block and a half apart? [402]

A. They are separated, and where the position is isn't going to influence the accuracy in any manner.

Q. So the method of weighing, whether done on a single scale or on a double scale, has nothing to do with the nature of the discharge? Do you understand my question?

In other words, if we use a single scale to weigh both the aggregate hopper and the cement hopper, we don't get any different result insofar as the discharge from the two is concerned than we do if we have them each on separate scales, do we?

A. The discharge is something else. The discharge really has no relation to the weighing. You can discharge in a different manner.

Q. The discharges of the cement hopper could be positioned say to one side of the aggregate hopper, rather than in the center. Would you then ob-

(Testimony of William H. Wisniski.)

tain a different flow than you would if it were centrally located?

A. Oh, I was trying to visualize what you are leading up to. You have it to one side rather than in the middle?

Q. In the center. Just move the cement hopper over to the side and let it discharge over to the side, rather than in the center of the aggregate hopper. Is there any change in the result?

A. The mixing efficiency of the mixer?

Q. Any difference in the discharge of the batching apparatus. [403]

A. Well, there is plants of this description I think you described, and actually, you mean the feeding of that cement into the discharge stream of the other materials?

Q. Yes.

A. It actually feeds in in a satisfactory manner, regardless of whether it is in the side or in the center.

The Court: It doesn't make any difference, in your opinion, whether it is in the center or to one side?

The Witness: No, sir.

Q. (By Mr. Lyon): Does it make any difference whether or not the discharge of the cement hopper is positioned above the discharge of the aggregate hopper? Do you get any different result by virtue of that, or could they be in the same plane? Just slip this down and put it in the same place as

(Testimony of William H. Wisniski.)

that discharge and let them both go. Is it going to make any difference?

A. Would you repeat that?

(Question read.)

The Witness: A lot of that has to do with the nature of the operation itself, what plane you have there, whether you can keep that hopper free by having that gate on the same plane.

Q. (By Mr. Lyon): In other words, it might become clogged by the aggregate? [404]

A. In this sort of plant, if you lower that too far, your aggregate is going to bear up against your batcher and, therefore, the weight of this cement will be influenced so you can't lower it below a certain point or else you will bind the batcher, so you have to keep it up so you won't bind.

The Court: Mr. Lyon, I notice it is 3:00 o'clock. We will take our afternoon recess. We will now recess until 15 minutes after 3:00.

(Recess.)

The Court: You may proceed.

Q. (By Mr. Lyon): Mr. Wisniski, what are the two major causes of failure of a concrete batch?

A. Oh, by that I would say that you mean the lack of mixing——

Q. Properly.

A. Properly mixing. One thing I found, a very common cause throughout the country, is overloading of batches. That is one very common item.

(Testimony of William H. Wisniski.)

Q. That means that the operator of the batching plant puts too much into the mixing?

A. A Mixer will not mix efficiently if it is overloaded. It is designed for a certain amount and if that amount is exceeded to any great extent, it will not mix properly.

Q. So that when you have been called out to figure out why certain concrete was not being prepared correctly, one of [405] the frequent difficulties you found was that they were overloading their batch in the mixer?

A. Yes, that is very common, because with the transit-mix industry, for instance, they can deliver, say, a yard in excess of the capacity of the mixer just as cheaply as they can the batch the mixer is designed for, so they very commonly overload.

Q. What would be the second cause, now?

A. Oh, another thing that contributes to a great extent is the timing of the sequences of these various ingredients going into a mixer. Oh, I might describe the situation at Coulee Dam, and also other, especially government projects. We had to time the ingredient discharges to split seconds, so that we would have them in the mixer in just exactly the right sequence. We actually used stop watches on the gates that they opened at exact intervals and also pinched down the gates so that they emptied in certain times at certain rates, and that was very critical.

I described before that we actually tried to cut down our mixing time to the least possible amount

(Testimony of William H. Wisniski.)

on that job, because time was particularly of an essence on that job, and they could take the concrete faster than the mixing plant could mix it, so we actually tried to get the operation as efficient as possible, and discharges were timed to, as I said, split seconds. [406]

Q. So no matter what type of batching equipment you are going to run, you can get a good batch from any kind of equipment. If you have a good operator, you can get a good batch of concrete, and if you have a bad operator, you will get a bad batch, is that correct?

A. That is very true, and also the technicians, or whoever he has setting the equipment and controlling it. With any kind of a plant, the best of plants with a poor operator and the equipment not timed properly, you can get lousy concrete or poorly mixed concrete. In any plant, it is very important to time the discharges correctly.

Q. Is that particularly true of the introduction of water into the mixer?

A. Water is very critical. That is one of the critical items in the mixing. You generally lead the batch with water. You start the water before everything else goes down, and maybe some of the coarse rock with the water, and that water is introduced through the whole period of batching while all the other ingredients are passing into the mixer, and you actually have a small amount of water trailing at the very end, so that water is introduced at

(Testimony of William H. Wisniski.)

a very careful rate to that batch to give you the maximum mixing efficiency.

Mr. Lyon: I believe that's all I have. Your witness, Mr. Sellers. [407]

Cross-Examination

By Mr. Sellers:

Q. Mr. Wisniski, will you tell us something about the flow characteristics of cement? How does it flow? Does it flow like water or what are its characteristics?

A. Well, cement, you generally—it is not exactly free flowing. It flows, oh, when you open a cement batcher, if that material is just freshly introduced, it will flow out quite readily and, oh, empty the batcher completely, but many times if, say, it stays in the batcher for a considerable period, say half an hour or more, you may have to have a vibrator on that batcher to kick it down. Many times in a bin itself, you have to introduce air into that bin to make it flow properly.

Q. Is it desirable to have the flow path of the cement as short as possible, all other things being equal?

A. Oh, the big item in having the path short is that you don't have as many places for it to hang up as if you have a long chute between the actual weighing mechanism and a batch some place that can't clean itself. It is likely to hang up en route.

Q. Have you had experience in plants with see-

(Testimony of William H. Wisniski.)

ing what happened where the cement was hung up?

A. Yes.

Q. Give us an example of one of those cases, will you, [408] please?

A. It will hang up in practically every plant I have been around, it will hang in the batcher, and it has to be vibrated down, requiring quite a little vibration to vibrate down, and most plants have air connected to the batcher itself to aerate the cement, make it flow better.

Q. You would say from your previous statement that the longer the path the cement has to travel, the more places for it to hang up, and the more difficulty in hanging up would be encountered, is that correct?

A. That is correct, and in most places they accomplish not having it hang up, like on a large Johnson plant, generally you have a large collecting hopper, and if the cement came down by itself, it very well would coat that hopper and would hang up in there, but you time your ingredients so that something else knocks it on down. The other ingredients wipe it clean.

Q. You wouldn't recommend feeding the cement into the side of the gathering hopper at one side, would you, by itself?

A. Oh, it is done in many cases and done satisfactorily.

Q. Wouldn't it tend to adhere to the metal surface of the gathering hopper?

(Testimony of William H. Wisniski.)

A. Well, you should have some material passing over that mouth that wipes that gathering hopper clean.

Q. Have you had any difficulty with the conduit in that [409] type of hopper becoming clogged due to moisture? A. Not particularly.

Q. Not particularly. The use of vibrators in these mix plants, isn't that rather objectionable with the noise which they create?

A. Well, plants are naturally noisy in any case, especially where you have a mixer connected. That is very noisy, and the vibrator isn't much noisier than some of the other noises.

Q. In other words, it is just that much more noise?

A. Well, it is that much more noise. It is a necessary noise, I would say, because most hoppers don't empty too well by themselves, or in many cases they might, but you get a condition like I spoke of where if that batch has been in there for a considerable period, you may take quite a lot of vibration to kick it all loose.

Q. I take it that whether or not time is important in the mixing operation is a question of the particular job you are on. On some jobs it is important and on some jobs it isn't important, is that correct? A. Mixing time?

Q. Yes.

A. Well, it depends—that is true in many cases. There are jobs where their mixing plant is of such capacity where it can more than keep up with the requirement or the [410] placing facilities for the

(Testimony of William H. Wisniski.)

concrete. In other places they may have a small plant and will want the concrete much faster than the plant can deliver it, so the mixing time is of essence.

Q. Referring now to the Johnson patent which was pointed out to you on direct, and particularly to Fig. 1, you see the aggregate coming down at the sides, along the sloping sides, and then you see the cement coming down in the center, and at Fig. 2 you see much the same sort of thing.

Wouldn't the aggregate coming down the side, due to the fact that it is sliding along the sloping side, tend to project itself into and under the downwardly falling flow of cement, in your opinion?

A. Well, if you visualize the streams there, both sides have to pass down together, isn't that so?

Q. Yes.

A. Well, doesn't this material block the flow of this past that point?

Q. Would you say, then, that the cement tended to fall right down on top of the converging streams of the aggregate?

A. Well, it must if it is located right over the top of it.

Q. Would you say that the cement fell right into the aggregate?

A. Well, it does fall—the streams [411] converge.

Q. Yes. All right. Now, you have said you didn't know whether any mixing action took place up at this point. Let's assume these streams are

(Testimony of William H. Wisniski.)

falling down, the cement is falling into the converging streams. You have said that you didn't know whether any mixing action took place, and I think you said you rather doubted any did.

Wouldn't it be a fact, with the aggregates falling down, converging together, with the cement falling on top of the converging aggregates, that the cement would essentially, being a lighter substance, go into the voids in the aggregate and become mixed with it?

A. Well, you visualize—well, you take the sand, for instance.

Q. No; let's take the cement. I want to know what happens to the cement.

A. The cement, if this rock is extremely porous, it will enter the voids of the rock immediately adjacent to it, but how far that will penetrate is very questionable.

Q. You have never taken a cross-section right there to determine?

A. No. You can't really see what goes on there.

Q. Therefore, you don't know that it doesn't penetrate and mix at that point; do you?

A. I can't say that it mixes or doesn't mix.

Q. In other words, you don't really know whether it [412] mixes or not? A. No.

The Court: Does anybody know?

Mr. Sellers: No; but this witness said, your Honor, it didn't mix, and now I am interested in knowing that he doesn't know whether it mixes or not.

(Testimony of William H. Wisniski.)

The Witness: Well, I was just trying to visualize the actual streams there. To mix, you have got to get a folding and refolding of the material.

Q. (By Mr. Sellers): Do you distinguish, Mr. Wisniski, between mixing and intermingling? Does mixing have a particular meaning in the concrete art? The reason I ask is that I have heard you talk about rolling and rolling over and mixing, as though unless you have the rolling you can't have mixing. Now, supposing we don't have a rolling back and rolling over, but we merely have the streams coming together and the cement going into it. Wouldn't you have intermingling, whether you have mixing or not? A. I am sure it intermingles.

Q. Fine. That's all I wanted to know. You have referred to specifications of mixing times and that you didn't know that any particular specifications had been written for one type of batching plant as distinguished from another. Was that your statement?

A. Well, I might clarify that, because there are two big [413] differences, your dry plant and your wet plant, which make a big difference. Your dry plant, where your concrete is actually mixed in this transit-mixer, and it will generally have a specification for the transit-mixer in that case, and in another case where it is mixed in a wet plant, where it is actually mixed in a central mixer right below the batchers or adjacent, and you will have a certain mixing time specified for that.

Q. Would it be your opinion that these speci-

(Testimony of William H. Wisniski.)

fications of time are usually written in order to insure that even the poorest mix which gets in there will have adequate time to become mixed in the time allotted?

A. That is what they attempt to do.

Q. Yes.

A. But many times even poorly batched material or overloaded mixers, you don't get proper mixing even with that time specified.

Q. So that if the pre-mix or the intermingling which we have identified as possibly taking place or as taking place in the type of plant shown in Plaintiff's Exhibit 14, if there is that intermingling and the concrete is intermingled with the aggregate, the possibilities would be that such a mix, when put in a transit-mix truck, would have certainly a greater probability of being satisfactorily mixed within the time limit than one which is poorly mixed; wouldn't you say?

A. That is a difficult question to answer. The timing, [414] as I explained before, the timing of this material has a great——

Q. Let us assume we have simultaneous discharge of the aggregates and cement, they are all going down together, we do have the intermingling action I referred to, we have the cement and the aggregates being discharged with the cement intermingling. Now, my question would be in that case wouldn't you consider it likely or even more likely that such a mix would fall within the time limits specified than a mix which is poorly mixed, in which

(Testimony of William H. Wisniski.)

the cement was spaced at a distance from the aggregate?

Mr. Lyon: Your Honor, may I object to that question? I don't know what you mean by poorly mixed or spaced. Do you mean the time or distance?

Mr. Sellers: In distance.

Mr. Lyon: In distance.

Q. (By Mr. Sellers): Now, do you understand the question?

A. I am trying to visualize the question. Whether you had a condition like this where you batched your cement, intermingled it right at the point as against—what was your second condition?

Q. The second condition would be one in which the aggregate and the cement go into the mixing truck in a completely unintermingled condition.

A. That is true. I spoke of that experience where they [415] batched the cement on top of the batch and, of course, this condition where you intermingle it to some extent will improve your mixing action; yes.

Q. You use the words "to some extent." As a matter of fact, it would very likely improve it very definitely?

A. To what extent, I can't say.

Q. You believe it would very definitely have an influence in improving it?

A. It would influence the improvement. To what extent, I wouldn't say.

Q. You haven't tested it? You don't know?

(Testimony of William H. Wisniski.)

A. I wouldn't say without testing it. The type of mixer itself would have some bearing.

Q. In the cement flowing down as it does here from the center hopper, protected from the sides, as it would be, the sides of the gathering hopper, the sides of the aggregate hopper, by the aggregate itself, would you not eliminate, in your opinion, any probability of the cement hanging up on the metal walls?

A. You can't eliminate it even with this arrangement entirely. One thing, if this doesn't discharge in the right sequence, which sometimes it doesn't do, all of this material could pass down and some of your cement falling on your bare hopper here, but even it wouldn't stay there in any case beyond the next batch, because this would wipe off from the material [416] passing over it.

Q. Assuming, however, a simultaneous discharge, would not the aggregates tend to eliminate any hanging up of the cement?

A. It wipes it clean.

Mr. Sellers: Thank you. That's all.

The Court: Before we excuse this witness, I want to be sure I get something clear. According to my notes, you testified that back in 1935 concrete was weighed separately from the aggregate hopper.

The Witness: Cement, sir.

The Court: I mean cement was weighed separately from the aggregate.

The Witness: Yes.

(Testimony of William H. Wisniski.)

The Court: There are two different weighing mechanisms?

The Witness: Yes, sir.

The Court: One weighed the cement and the other weighed the rock and gravel?

The Witness: There were actually several. On the big plant at Coulee, there were several.

The Court: The cement was weighed separately?

The Witness: Yes, sir.

The Court: Now, you testified it wasn't until 1947 that you became acquainted with an operation by which there was one hopper inside of another hopper, the inside hopper holding the [417] cement and the outside hopper holding the rock, sand and gravel; is that right?

The Witness: Yes, sir.

The Court: So you didn't become acquainted with the weighing of one inside the other until 1947?

The Witness: It so happened in that period that I didn't have the opportunity to——

The Court: Well, I know. I just want to know if I got your testimony correctly.

The Witness: Yes, sir.

The Court: All right.

Mr. Lyon: I have a couple of questions, your Honor.

(Testimony of William H. Wisniski.)

Redirect Examination

By Mr. Lyon:

Q. Referring now to the Robb patent, does not the aggregate and the cement become intermingled upon falling into the collecting hopper before passing into the mixing truck in the same sense that you were talking about there being a possibility of some intermingling in the——

Mr. Sellers: I believe that has been asked and answered, your Honor.

The Court: Overruled.

The Witness: Naturally, it would, as all the materials fall into the collecting hopper, they must intermingle. [418]

Q. (By Mr. Lyon): Any time you have a batching equipment with a collecting hopper, you have a certain degree of intermingling; is that correct?

A. That's right.

Q. That is always prior to it being discharged into the truck?

A. Regardless of the equipment you have, you have to have a collecting hopper, something that funnels the material down to a small enough chute that it can go into the restricted mouth of the mixer, regardless of the type.

Q. In other words, in all of your experience, in all the plants that you have seen, they have had a collecting hopper of some form in order to screen the material into a shaft small enough to get into the mixer?

A. That's right.

(Testimony of William H. Wisniski.)

Q. And in that collecting hopper a certain degree of intermingling of the ingredients takes place? A. That's right.

Q. In such an apparatus where you have a collecting hopper, does not the discharge of aggregate wipe the cement from the collecting hopper and prevent it from hanging up?

A. Yes. Your timing and the batching of your materials must be such that you do accomplish that. You must time and batch your materials so that you never do have any cement or sand, too, under that condition hanging up there. [419]

Mr. Lyon: Thank you. That's all I have.

The Court: May this witness be excused?

Mr. Sellers: I would like to ask one question.

The Court: All right.

Recross-Examination

By Mr. Sellers:

Q. Didn't you say on direct, Mr. Wisniski, in the Robb patent construction which counsel just pointed out to you, that there was the very minimum of mixing action in that gathering hopper?

A. Well, he didn't say mixing. The question he asked was, is there any intermingling there. Well, there is as much intermingling in any gathering hopper.

Q. I don't believe that the record will show that counsel used the word intermingling in his direct examination. I think you said there was a minimum

(Testimony of William H. Wisniski.)

of mixing action. Do you recall, or can we check the record on that?

The Court: Well, now, the record speaks for itself.

The Witness: Well, probably the reason I didn't use intermingling there was you brought up the point and introduced the term of intermingling to me.

Mr. Sellers: I move to strike that as not responsive to my question.

The Court: It may go out. [420]

Mr. Sellers: Your Honor, I believe the record would show that the witness, in honesty I admit, has stated two different facts in his direct and in his redirect.

The Court: It is up to the court to evaluate the testimony of this witness.

Mr. Sellers: You would rather not take the time to check it?

The Court: I don't want to take the time to go back and check the record.

Mr. Sellers: Thank you, your Honor.

The Court: May this witness be excused?

Mr. Sellers: Yes.

The Court: You may be excused.

(Witness excused.)

The Court: Call your next witness.

Mr. Lyon: Mr. Stromberg, please.

MERLE STROMBERG

called as a witness by and on behalf of the plaintiff, having been heretofore duly sworn, was examined and testified as follows:

Direct Examination

By Mr. Lyon:

Q. I show you Exhibit 14, indicating the means for [421] dispersing water into the aggregate shaft, and ask you how many of such means have you ever manufactured? A. One.

Q. And that means was positioned on what plant? A. The Stanton plant.

Q. Have you ever had contact with any other such means? A. Yes.

Q. Where was that?

A. One was installed by the Conveyor Company on the Gardena plant. It was in operation about five or six months. They found out that it had a plugging action at the discharge end. It was taken off and used for the purpose of burning papers and other materials.

Q. So you did not place that particular water dispersing means on that Gardena plant?

A. No.

Q. You were merely asked to remove it?

A. The one that was removed was not placed there by me.

Q. So that you have made only one of these devices and installed it; is that correct?

A. Yes.

Q. You testified on your deposition, I believe,

(Testimony of Merle Stromberg.)

that the majority of your plants—I forget the words counsel used—were of the Johnson type at that time, and you testified, when [422] asked the question later, as of this date that some 50 per cent of your plants had a hopper within a hopper.

Why did you change your construction from this type to the side entering type? Was that on the advice of counsel?

The Court: Well, we don't have any testimony here that he changed the construction, as far as I know.

Mr. Sellers: Thank you, your Honor.

Mr. Lyon: He made an effort to point out the inconsistencies in Mr. Stromberg's testimony and I am trying to clarify it.

The Court: That may be true, but he hasn't testified he changed his design.

Mr. Lyon: Pardon me. I will ask the question again.

The Court: You can ask him if he did.

Mr. Sellers: The record shows, your Honor, he stated the drawing there was typical of all the plants he has made.

The Court: All right. Proceed.

Q. (By Mr. Lyon): Have you made a side entry plant? A. Yes.

Q. When did you start making those plants, do you recall?

A. About three and a half years ago, I believe, was my first one.

Q. Did you stop making this type of a batching

(Testimony of Merle Stromberg.)

apparatus at one time? [423] A. Yes.

Q. Why did you stop?

A. On the advice of my counsel at that time.

Q. So that at the present date approximately 50 per cent of the plants that you have constructed are of this type; is that right?

A. Of that means of aggregate hoppers and cement hoppers in the center on separate scales.

Mr. Lyon: That's all the questions I have.

The Court: Now, counsel, restrict your cross-examination to the problem that has been presented.

Mr. Sellers: Thank you, your Honor.

Cross-Examination

By Mr. Sellers:

Q. In the plant we are looking at, as illustrated in Plaintiff's Exhibit 14, are the bins marked sand, gravel, and sand, part of the plant?

A. Part of the plant? .

Mr. Lyon: Object to that, your Honor. That goes beyond the scope of the direct examination.

The Court: Sustained.

Mr. Lyon: I asked him two questions.

Mr. Sellers: All right.

Q. In the drawing shown in Plaintiff's Exhibit 14, do [424] we show a gathering hopper as a part of the plant?

Mr. Lyon: I will object to that as beyond the scope of the direct examination.

The Court: Overruled.

(Testimony of Merle Stromberg.)

Mr. Lyon: I asked him only about two points.

The Court: This is preliminary. The water apparatus is part of the gathering hopper.

The Witness: Will you repeat the question?

Mr. Sellers: Will you repeat the question?

(Question read.)

The Witness: Yes; you show it as part of the plant.

Q. (By Mr. Sellers): Is the water discharge means a part of the gathering hopper?

A. Yes.

Q. And is it not a fact that you have stated that the illustration we have embodied in Plaintiff's Exhibit 14 is typical of all the plants you have made of the type in which a center hopper is positioned between the portions of aggregate?

Mr. Lyon: I will object to that, your Honor.

Mr. Sellers: I have the right to cross-examine this witness to point out, your Honor, that he stated the same thing differently two different times.

The Court: Overruled. Read the question.

(Question read.)

Q. (By Mr. Sellers): Have you or have you not so stated? [425]

A. Of this type, yes.

Q. Then you agree, then, that in the plants of the type embodying the centrally positioned cement hopper, and the position between the aggregate hop-

(Testimony of Merle Stromberg.)

pers, that the showing of Plaintiff's Exhibit 14 is typical?

A. It is if two scales are used, yes.

Q. You have stated on direct that you stopped making one type plant. What type plant was it you stopped making?

A. I haven't stopped making any type of plant. On the advice of my counsel I have refrained from building an aggregate hopper with partitions in it for a separately hung cement hopper.

Q. When did you begin your refraining from building that type of construction?

A. Well, it was in 1955, some time during 1955. I would say about the middle of 1955.

Q. That was after you built the Stanton plant, was it? A. Yes.

Q. I would like to know how you bring into agreement the fact that the showing here in Plaintiff's Exhibit 14 is typical of all the plants you have made of this type, when you stated on direct examination to your counsel that the other plants you made did not have water feed as shown here?

Mr. Lyon: Your Honor, I will object to that as argumentative. Counsel's terminology in his question initially was, [426] is this typical of your plants showing a hopper within a hopper construction? It did not extend to the whole plant or the whole details.

The Court: As I remember the original examination, no mention at all was made of the water feed. In fact, you are the one who brought up the water

(Testimony of Merle Stromberg.)

feed. I did not know the water feed was in this case.

Mr. Lyon: It is in Claim 5, your Honor.

The Court: That's all right, it is in the claim, but as far as the testimony was concerned, I don't think this witness was asked anything about the water feed.

Mr. Lyon: I agree with your Honor. The question he asked on direct examination did not incorporate that feature.

The Court: You are the only one who asked about water feed.

Mr. Lyon: That's right.

Mr. Sellers: My point is, your Honor, he has stated he didn't make plants with gathering hoppers in any plant other than this plant, I believe.

The Court: No. My understanding is he didn't make a plant with this particular kind of water feed.

Mr. Sellers: All right.

The Court: The watering feed is only part of the gathering hopper.

Mr. Sellers: All right, your Honor, I will accept that, [427] your Honor, but the witness has testified on cross that this drawing showing this construction is typical of all the plants.

The Court: Generally typical. We were talking, as far as I know, about the center hopper being within the aggregate hopper, and I thought that was the issue here.

(Testimony of Merle Stromberg.)

Mr. Sellers: That is, but claim 5 also brings in the water feed, your Honor.

The Court: You didn't ask about the water feed. The fact of the matter is until Mr. Lyon asked the question, nobody had asked a question about the water feed.

Mr. Sellers: Well, it has been stated on cross examination, your Honor, that the water feed is a part of the gathering hopper, which is shown here, and he has stated that is part of the plant.

The Court: That's right.

Mr. Sellers: And he has also stated that the showing here is typical of all the plants.

The Court: I know what he stated.

Mr. Sellers: All right. I shall let it rest at that. That's all, your Honor. Thank you.

Mr. Lyon: No further questions.

The Court: It's nearly 4:00 o'clock and I don't think we will call another witness until in the morning.

Mr. Lyon: That's all. You may step down, Mr. Stromberg. [428]

(Witness excused.)

The Court: Court will stand in recess until 10:00 o'clock tomorrow.

(Whereupon, an adjournment was taken to 10:00 o'clock, a.m., Friday, March 16, 1956.)

Friday, March 16, 1956—10:00 A.M.

The Clerk: No. 17,121-HW, C. S. Johnson Company vs. Merle W. Stromberg, et al., further trial.

Mr. Lyon: Mr. Murasko, will you take the stand, please?

VERNON MURASKO

called as a witness by and on behalf of the defendants herein, having been first duly sworn, was examined and testified as follows:

The Clerk: Will you state your name, sir?

The Witness: Vernon, V-e-r-n-o-n, Murasko, M-u-r-a-s-k-o.

Direct Examination

By Mr. Lyon:

Q. What is your present occupation, Mr. Murasko?

A. Plant Superintendent for Western Concrete Company in Los Angeles.

Q. What is your age, sir? A. 52.

Q. What was the first occupation you had?

A. My first occupation was working for the American Can Company in San Francisco when I graduated from school.

Q. When did you have that job?

A. Probably in 1916.

Q. Where were you employed in 1920? [432]

A. In 1920 I was a stevedore for Matson Navigation Company.

Q. In 1921 where did you go to work?

A. I went to work for Bode Gravel Company

(Testimony of Vernon Murasko.)

or Bode Mixed Concrete Company. They are recognized under both names.

Q. What were your duties for the Bode Company?

A. In 1920 I was a truck driver for them.

Q. How long did you continue as a truck driver?

A. I drove a truck for them until 1929.

Q. At which time you undertook what duties?

A. Well, I was out of their employ during the depression for a period of several months in the latter part of 1929. I went back to work for them as a plant operator in 1930.

Q. What kind of plant were you operating?

A. Wet mix concrete plant.

Q. Where was this plant located?

A. On Geneva Street and Tara Street.

Mr. Sellers: Your Honor, I should like to object to this entire line of testimony for the reasons we have previously discussed. There has been no notice.

The Court: I don't know. He is laying a foundation. I don't know what he is leading up to. Maybe you know more than I do.

Mr. Sellers: I think I do, your Honor. [433]

The Court: Let's wait until it develops.

Mr. Sellers: All right. I want the record to show though, I think it is for anticipatory purposes and I do object.

Q. (By Mr. Lyon): How long did you operate the Geneva plant?

A. Oh, for a period of about six months.

Q. Then where did you go, sir?

(Testimony of Vernon Murasko.)

A. The company I was working for decided to construct another plant at 235 Alabama Street in San Francisco, and due to the success I made of operating the Geneva plant, they put me down there before that plant was completed to learn the details of it and to operate it. It was in the downtown area of San Francisco, a major installation.

Q. I now show you Plaintiff's Exhibit A for identification and ask you if this drawing illustrates the construction of the aggregate and cement hoppers in that plant.

A. I worked with the firm——

The Court: Wait a minute. You say that plant. Which plant?

The Witness: That is the Alabama plant.

Mr. Lyon: The Alabama Street plant.

The Court: When was the Alabama plant established?

The Witness: 1931.

Mr. Sellers: I wish to object, your Honor. There has [434] been no proper foundation laid for this drawing.

The Court: What do you mean? Isn't the drawing in evidence?

Mr. Sellers: It has been marked, but he is about to identify it as being connected with the plant he worked for. It has not been established who made the drawing.

The Court: What is the number?

Mr. Sellers: Or its accuracy.

Mr. Lyon: It is Defendants' Exhibit A.

(Testimony of Vernon Murasko.)

The Court: Is A in evidence?

The Clerk: No. It is marked for identification.

Mr. Lyon: I am trying to lay a foundation for it at the present time.

Mr. Sellers: Did this gentleman make the drawing?

Mr. Lyon: If you will permit me to interrogate him further, Mr. Sellers, I believe I can establish his knowledge of the drawing.

The Court: Objection overruled.

Q. (By Mr. Lyon): At the time that the Alabama Street plant was being constructed, did you see drawings of that plant?

A. I saw a drawing similiar to this.

Q. It showed the same details as this?

A. Same details, yes.

Mr. Sellers: I object, your Honor, to the leading [435] question. This is very critical and I don't believe the witness should be led.

The Court: There has been a lot of leading questions in this case by both sides. I think you have been just as much at fault as far as leading questions are concerned.

Mr. Sellers: There were no objections, your Honor.

The Court: Yes, but I noticed there were leading questions. All right. Don't lead the witness.

Mr. Lyon: I will try not to.

The Court: May I inquire? You said when you quit school. What school did you quit?

(Testimony of Vernon Murasko.)

The Witness: I graduated from the Columbia Grammar School in San Francisco.

The Court: You didn't go beyond the grammar school stage?

The Witness: No, sir.

The Court: You had no engineering experience?

The Witness: No, sir, I did not.

The Court: Have you had any engineering training relative to the drawing of blueprints?

The Witness: No, sir, at that time, no.

The Court: Since then?

The Witness: Since then I have constructed 15 complete plants.

The Court: You have constructed. Were you in charge? [436]

The Witness: That's right. I am in charge of building a plant at Costa Mesa right now.

The Court: From blueprints?

The Witness: Yes.

The Court: And from plans and specifications?

The Witness: Right.

The Court: How long have you been building these plants from plans and specifications?

The Witness: Let's see. On my own——

The Court: You say you built 15 of them?

The Witness: I started in 1942 in Nevada. I constructed three plants there. I made a good reputation for myself and the company I was working for brought me to Los Angeles.

The Court: Well, we know your reputation is good and all that, but I am not interested in your

(Testimony of Vernon Murasko.)

reputation. I am interested in your background relative to the reading and interpretation of plans and specifications and drawings.

The Witness: Certainly from experience on the job.

The Court: In the building of these plants, you had to read plans and specifications?

The Witness: That's right.

The Court: Interpret blueprints?

The Witness: That's right.

The Court: How many years have you been doing that?

The Witness: Since 1931. [437]

The Court: Since 1931?

The Witness: I operated this particular plant, yes, and I rebuilt it, rebuilt the Geneva plant. I put up plants or rebuilt plants in the Los Angeles area for various companies besides the company I worked for because of my experience.

The Court: Do you want to take this witness on voir dire relative to his qualifications to read blueprints?

Mr. Sellers: Yes, your Honor.

The Court: You may take the witness on voir dire.

Voir Dire Examination

By Mr. Sellers:

Q. What is your educational background, please? A. Grammar school.

(Testimony of Vernon Murasko.)

Q. From grammar school you went to work as a stevedore?

A. No. I went to work for the American Can Company.

Q. Then later you became employed as a stevedore? A. That's right.

Q. Then later you went to work for the Bode Gravel Company, Bode Mixed Concrete?

A. That's right.

Q. In that connection you were a truck driver?

A. That's right.

Q. Did you have any contact with drawings at that time? A. No, I didn't. [438]

Q. When the Alabama Street plant was constructed, did you have anything to do with the design of that plant? A. No, I did not.

Q. What was your employed position with the company at that time?

A. I was the operator of their Geneva plant, and this business, ready-mix concrete business, was in its infancy at the time.

Q. Please. That is not responsive.

A. I see.

Q. What were your duties in your position with the company at that time?

A. To help build that plant and learn how to operate it.

Q. Do you know who made the drawings for that plant?

A. Bodinson Manufacturing Company.

Q. Who?

(Testimony of Vernon Murasko.)

A. Bodinson Manufacturing Company, B-o-d-i-n-s-o-n.

Q. I would rather you speak from your own recollection, please.

A. I remember the man that built it.

Q. Bodinson Manufacturing Company made the plant? A. That's right.

Q. Who was the engineer in charge of that company? A. Jones, Senior. [439]

Q. Do you remember his first name?

A. At times I do and at times I don't.

Q. How about this time? A. No, I don't.

Q. Just Jones, Senior? A. That's right.

Q. Was there a Jones, Junior?

A. I met his son since then. He must have had the son at that time.

Q. He must have had a son, but you don't know?

A. No, he did have a son.

Q. Are you sure? A. Positive.

Q. Where was he? A. I don't know.

Q. Did you see Mr. Jones, Senior, make any drawings for the Alabama Street plant?

A. No, I did not.

Q. Do you know whether or not he made any drawings?

A. He was supposed to have made them. He was the engineer for Bodinson Manufacturing Company.

Q. Do you know where Mr. Jones, Senior, is now? A. Mr. Jones, Senior, is dead.

Q. How do you know that?

(Testimony of Vernon Murasko.)

A. He was in an automobile accident with Mr. Bodinson [440] going North.

Q. Were you there at the time?

A. No, I was not.

Q. You merely heard about it?

A. That's right.

Q. You don't know it to be a fact of your own knowledge? A. I don't.

Q. You didn't attend the funeral?

A. I didn't attend the funeral, but I know a lot of people that were there.

Q. You don't know who made the drawing, the drawing that is the original of this?

A. I presume Jones, Senior, made the drawings.

Q. But you didn't see him make them?

A. No.

Q. Did he tell you that he made this?

A. No, he didn't.

Q. Did he tell you what scale he made that drawing to? A. No, he didn't.

Q. Did he tell you he made it accurately?

A. No, he didn't.

Q. Didn't tell you he made it at all, did he?

A. No, he didn't.

Q. As a matter of fact you don't know who made it? [441] A. I presume——

Q. No. Do you know?

A. I don't know who made it.

Q. You don't know where the original has been from that time up to this, do you, the original of this ozalid print? A. No.

(Testimony of Vernon Murasko.)

Mr. Sellers: Do you think he is qualified to testify concerning this drawing, your Honor?

The Court: Well, he may not be qualified to testify as to drawings, but he is certainly qualified to testify how he built the plant, if he built it.

Mr. Lyon: If your Honor please, I have somebody else to testify to the drawings. All I want this man to testify to is how he built it.

Mr. Sellers: All right, then, if you will admit that he can't identify the drawings, we will go on to the plant.

Q. You say you built the plant?

A. No, I did not.

Q. What did you do?

A. I was helping to build the plant so I would know how to operate it.

Mr. Lyon: Your Honor, I thought he had him on voir dire to question his ability to recognize this drawing, not to cross-examine him as to his whole testimony, which hasn't been [442] given yet.

Mr. Sellers: How can he recognize the drawing? He never saw the original.

The Court: Well, Mr. Lyon says he is not going to offer the drawing upon the testimony of this witness. That was the only purpose of the voir dire, and I think possibly you have established your point.

Mr. Sellers: I would like to establish a little bit more, if I may, your Honor, whether or not at the time he built the plant he had any experience in reading drawings.

(Testimony of Vernon Murasko.)

The Court: All right. You can do that.

The Witness: I did not.

Q. (By Mr. Sellers): I beg your pardon?

A. I did not.

Q. Do you have any recollection that at the time that plant was built you ever saw the original of this particular drawing?

A. I saw a drawing similar to this.

Q. What do you mean by similar?

A. The same type of drawing, the same scale, the same hoppers, because I operated those hoppers for 15 years.

The Court: You say you operated them?

The Witness: I did.

Q. (By Mr. Sellers): That was before or after this drawing? [443]

The Court: That was after the plant was established. He couldn't do it before the plant was built.

Mr. Sellers: That is correct.

Q. At the time, however, that plant was built, you had no experience in reading drawings whatsoever? A. None whatsoever.

Q. So as of that time you were unskilled in the reading of drawings, you really were unable to determine what a drawing showed at that time, weren't you?

A. I will have to answer you in different languages, yes and no. There is no detail to this. There was a picture, a sketch, and it was easy to recognize when the original metal was in front of you.

(Testimony of Vernon Murasko.)

Mr. Sellers: Well, I move to strike that as not responsive.

The Court: Denied.

Mr. Sellers: I would like to know, also, how you know what the sketch was if you didn't see the original drawing at that time. You said you saw a similar drawing, but you didn't see this drawing, did you?

The Witness: I saw one tracing the same as this one.

Q. (By Mr. Sellers): It was similar, wasn't it?

A. That's right.

Q. But you never saw this drawing before?

A. I don't know how many drawings were made before. [444]

Mr. Sellers: Your Honor, I respectfully represent that this gentleman at the time this drawing was represented to be drawn——

The Court: We are not questioning the drawing now. The drawing is out of the picture at this time. He can testify to what he did and saw regardless of the drawings, can't he?

Mr. Sellers: He certainly can, but I want to prevent this drawing getting in if I can.

The Court: Well, it hasn't been offered yet, as far as I know. If it is offered, the offer is refused at this time.

(Testimony of Vernon Murasko.)

Direct Examination

(Resumed)

By Mr. Lyon:

Q. Now, when you were operating the Geneva plant and were transferred to the Alabama Street plant, what was the condition of that plant? Was it fully constructed or not at the time you shifted?

A. The Alabama plant, you are speaking of?

Q. Yes, the Alabama Street plant.

A. The structure was built, but it was not being operated. It was minus the machinery.

Q. Minus the batching equipment?

A. That's right.

Q. The physical structure was there?

A. Yes. [445]

Q. What was that made of?

A. The structure was made of wood.

Q. Were you present while the batching equipment was being constructed?

A. I was present while it was being installed.

Q. In other words, it had been constructed somewhere else and brought there and installed in the structure that was there at the time you were there?

A. That's right.

Q. Do you know who built the batching equipment?

A. Bodinson Manufacturing Company.

Q. Did you help in the installation of this batching equipment in this structure?

A. I helped install these same hoppers.

(Testimony of Vernon Murasko.)

Mr. Sellers: Your Honor, I am going to object to these leading questions.

The Court: Overruled.

Q. (By Mr. Lyon): What was the construction of the hoppers? A. The hoppers were steel.

Q. How many hoppers were there in the batching equipment? A. Two.

Q. One for the aggregate and one for the cement? A. Correct. [446]

Q. How were they disposed with respect to each other?

A. The cement hopper hung inside of the aggregate hopper.

Mr. Sellers: Your Honor, I wonder if we may not ask that the drawing be removed from in front of the witness while he is testifying.

The Court: All right.

Mr. Sellers: There has been no basis laid to refresh his recollection from the drawing.

The Court: It may be removed.

Mr. Lyon: He has already testified he has seen it, but he doesn't need it.

The Court: Just a minute now.

You helped to construct this Alabama Street plant?

The Witness: I really helped to install the machinery.

The Court: You helped to install the machinery, you helped to install the hoppers?

The Witness: Yes.

The Court: Of your own recollection, you now

(Testimony of Vernon Murasko.)

say that the cement hopper was inside the aggregate hopper?

Mr. Sellers: He hasn't said that, your Honor.

The Witness: Yes, sir.

The Court: That is exactly what he said.

Mr. Sellers: I beg your pardon. I didn't hear him say it. [447]

The Court: Do you know whether or not there was a weighing apparatus connected to the cement hopper and the aggregate hopper?

The Witness: There were separate Krone dial scales connected to each hopper.

The Court: Independent of each other?

The Witness: Right.

The Court: This was in 1931?

The Witness: 1931.

Q. (By Mr. Lyon): How long did you operate the plant under those conditions?

A. I operated the plant physically for about ten years, and then I was made superintendent of the complete company.

Q. At the time this Alabama Street plant was constructed, where were the discharges of the cement hopper and the aggregate hopper disposed with respect to each other?

A. On the bottom.

Q. Was the cement hopper discharge positioned above the aggregate hopper discharge?

A. The discharge was above——

Mr. Sellers: I object to leading the witness, your Honor. He is leading the witness.

(Testimony of Vernon Murasko.)

The Court: Don't lead the witness. The witness can testify as to where the discharge of the cement hopper was relative to the discharge of the aggregate hopper. [448]

Mr. Lyon: All right.

Q. Can you draw for me a view of the hopper construction both from a side elevation, and then show me a second drawing of the discharges and their location with regard to one another?

A. Yes, I can. The discharge gate is here. There were baffles built like that within about four inches of this gate.

Q. Pardon me just a minute. Would you mark this gate with an A, just draw a lead line and mark it with an A?

A. The cement scale, the counter of it was the same as the——

Q. The cement hoppers?

A. The cement hoppers.

Mr. Sellers: I suggest you let him describe it.

The Witness: They hung here inside and the gate was here.

Q. (By Mr. Lyon): Would you like to label that gate with a B, please?

A. Looking at it from the top, your aggregate hopper was built like this. This is a section here.

Q. What does that represent?

A. That represents this baffle plate.

Q. Will you mark the baffle plate with a C, please? Just draw a line and mark it with a C, and would you do the same in the other drawing? [449]

(Testimony of Vernon Murasko.)

A. That was to give the hopper strength so these would not collapse. The cement hopper hung inside of it and was suspended with four long bolts to the ceiling.

Q. Just a moment, please. Would you label the cement hopper in the same manner except with a D?

A. All right.

Q. And also in this other view? A. Yes.

Q. Would you label the aggregate hopper with an E in both views? A. (Witness complying.)

Q. Now, will you continue your description, please?

A. Well, that takes care of it. Each hopper was suspended with four bolts from the ceiling, four bolts on the cement hopper and they supported the scale mechanism with a lever from this cement hopper, which was a little bit higher than the aggregate hopper. The beams of the weighing mechanism was there, and the lever came out to the side here and hooked to a dial scale.

Directly opposite that, the dial scale for the aggregate hopper was suspended from here.

Q. Will you mark that F, the scale for the aggregate hopper? A. (Witness complying.)

Q. Now, let's mark the figure 1 and figure 2, would you, [450] please?

A. (Complying.) I made a slight error here. I made an E instead of an F.

Q. Looking at figure 1, where is the cement hopper discharge located with respect to the aggregate hopper discharge?

(Testimony of Vernon Murasko.)

A. Approximately 12 inches above the aggregate hopper gate. This aggregate hopper gate had to be opened, and then you would open the gate on the cement hopper and it would go into the mixer.

Q. Just a minute. Pardon me, please.

A. All right.

Q. So the difference between A and B in figure 1 was substantially 12 inches, is that correct?

A. That is from bottom to bottom.

Q. Referring to figure 2, now, would you explain the relationship of the cement hopper discharge to the aggregate hopper discharge?

A. The aggregate hopper discharge had to be open to let the cement go out with it. In other words, you could open your cement discharge, but nothing would go out of that scale until the aggregate hopper gate was open, and then all your materials would come out together.

Q. Yes, but I am trying to find out where they were positioned. Off to the side, or something like that?

A. They were dead center, one above the [451] other.

Q. Positioned below the aggregate hopper was there anything between this mechanism and the truck or mixer in which it was discharged?

A. There was a stationary mixer. These two hoppers discharge into a stationary mixer. The concrete was mixed, dumped into a hopper, and there was an air gate on the hopper which would be

(Testimony of Vernon Murasko.)

opened by the driver of the mixer truck and the concrete would go into the mixer truck.

Q. You operated the plant in this condition from 1931 until when?

A. From 1931 until the last day of May, 1942.

Q. Was there anyone else present who operated that plant during that period?

A. A man by the name of Cornett worked for me. That is C-o-r-n-e-t-t.

Q. Did Mr. Cornett operate the plant during this period?

A. He operated very often. While I was superintendent, he was the operator.

Q. Did anyone else operate this plant besides you and Mr. Cornett?

A. A man who now is dead. Cahill is his name, C-a-h-i-l-l.

Q. What were some of the jobs upon which concrete mixed from this plant was used, can you recall? [452]

A. The Federal Building in San Francisco, the War Memorial Building in San Francisco, Sunset Reservoir in San Francisco, various sewer jobs, various buildings.

Q. Any particular structure built during that period of time which would help you locate in time when this plant was being constructed or operated?

A. One of the first jobs that this plant serviced was Letterman Hospital in San Francisco.

Q. Do you recall when the hospital was built?

(Testimony of Vernon Murasko.)

A. We were pouring concrete there in 1932 and 1933 on sidewalks, curbs and gutters.

Q. Did you use any concrete from this plant in any of the bridges in San Francisco?

A. We did.

Q. Which bridge?

A. The San Francisco Bay bridge.

Q. When was the San Francisco Bay bridge built, to your recollection?

A. My recollection would be around 1938. I am not sure.

Q. Are there any other buildings that concrete poured from this plant went into that would help you locate the point of time when all this occurred?

A. Why, yes. There was a reservoir being built in San Francisco they call the University Mound Reservoir. [453]

Q. About when was that constructed?

A. That would be about 1931. It was an addition and a repair job.

Q. Did this plant have any mechanism for inserting water into the mixture of cement and aggregate?

A. On the side of the aggregate hopper was a tank.

Q. Would you draw that in figure 1, please?

A. Well, figure 2 would be much better.

Q. Figure 2, if it is easier.

A. This here was built right on the side.

Q. Will you label that G, please?

A. (Witness complying.) Discharge pipe free

(Testimony of Vernon Murasko.)

of the hopper so it would not interfere with the weighing. We weighed our water and there was a separate lever on it.

The Court: You say you weighed the water?

The Witness: Weighed the water, yes.

The Court: All right.

The Witness: The tank was on a side view like this.

Q. (By Mr. Lyon): Label that G again, please, sir.

A. And there was a valve here and the water was weighed, with flexible line coming down to the mixer hopper here so that it would not interfere with the action of the scale. The water was weighed first. The cement, gravel and sand were weighed simultaneously.

The Court: How was the water inserted into the mix? [454] Just one stream?

The Witness: One steady stream.

The Court: Just one steady stream?

The Witness: That's right. The weighed water would discharge.

Q. (By Mr. Lyon): Would you describe the typical operation that you performed in batching concrete using this apparatus? Take us through the steps.

A. We would start weighing our cement, because it was slow weighing them days, and we would weigh our water while our cement was being weighed. Would weigh our gravel and sand.

Q. Pardon me just a moment. When you say

(Testimony of Vernon Murasko.)

weigh, let's follow the flow of the materials from some place to some place and see where they are weighed and how they are weighed.

A. We would weigh the cement that was fed from a tank directly overhead with a rotary feeder.

Q. Would you label that H, please? Thank you.

A. The cement would go into this here cement hopper. It had an automatic cut-off when it was first installed, and while it was being weighed automatically, I would weigh my water and weigh my gravel and sand.

Q. Now, let's get the gravel and sand into the aggregate hopper so we can weigh it.

A. There were eight gates above this hopper here, each [455] for a different size material. Eight gates here and the cement here.

Q. Would you label one of those gates as I?

A. (Witness complying.)

Q. Thank you. And through those gates from a bin your aggregate material was poured into your aggregate hopper?

A. Right.

Q. And in the aggregate hopper, then, the accumulation was weighed?

A. We use the cumulative weight on a dial scale.

Q. Now, with the cement in the cement hopper and the aggregate in the aggregate hopper, what was the next step in the operation?

A. We would open both gates simultaneously and leave the material, gravel, sand and cement and also the water, go into the stationary mixer.

(Testimony of Vernon Murasko.)

The Court: You turned it all on at the same time?

The Witness: All at the same time.

The Court: Including the water?

The Witness: Including the water.

The Court: Was there any problem of the water getting into the aggregate hopper? I mean into the mixing hopper first?

The Witness: It would make no difference. It was only a 28 S, one yard mixer, and was approximately 30 gallons. We [456] used about 250 pounds of water per yard on the average.

The Court: It wouldn't make any difference whether the water went in first?

The Witness: It wouldn't make any difference if the water went in first.

The Court: It wouldn't cause any balling?

The Witness: No, not in that size mixer.

The Court: So the water, the sand and gravel and cement were all turned on at the same time and they all went down this mixing hopper?

The Witness: That's right.

Q. (By Mr. Lyon): During the discharge, did the aggregate, the discharge from the aggregate hopper surround the cement discharged from the discharge hopper?

A. That was one of the features for having it built that way, because it did have a tendency to hold down the dust. The gravel and sand would come down and the cement would go down the center of it, and our feeding hopper to our mixer,

(Testimony of Vernon Murasko.)

stationary mixer, was built very steep. The gravel and sand would flow on it with a minimum amount of cement sticking to it. That was the principle of this design.

Mr. Lyon: I believe that's all the questions I have.

The Court: Now, Mr. Sellers, in order to preserve your record, I will entertain a motion relative to the striking of the testimony of this witness relative to the fact that you [457] didn't have notice.

Mr. Sellers: I do make such a motion, your Honor. Thank you.

The Court: You had better state your motion just exactly as you want it in the record. You said this is important and I agree with you it is important, so I want the record to show your motion as you want it.

Mr. Sellers: Your Honor, I wish to make the motion that the testimony of this witness be stricken in its entirety, the defendant having failed to comply with the provisions of 35 U.S.C., 282, requiring the giving of 30 days' notice prior to trial of prior public use, and including the other provisions with which he has failed to comply. I believe while it is a fact that the matter rests within the discretion of your Honor, yet in this case the exercise of that discretion in favor of the defendant is not to be indicated. I don't think you want an argument at this time. There is my motion.

The Court: No, I don't want an argument, but I want to ask you a question. Because of the testi-

(Testimony of Vernon Murasko.)

mony here and the production of this witness, this knowledge will become general among the trade. The next time you attempt to establish a patent or the next time you file a suit for infringement of this patent, if the patent is sustained, they will raise a question whether or not there is prior use. Wouldn't that be a good defense in a subsequent suit? [458]

Mr. Sellers: That would be important were it not a fact that the patent has expired. In other words, we are here seeking damages for past infringement. The patent has expired and—well, there could be more suits.

The Court: You mean to say the only thing you are interested in in this case is damages?

Mr. Sellers: Yes, your Honor.

The Court: It is not a question of the establishment of your patent?

Mr. Sellers: The patent has expired, your Honor.

The Court: So what you are fighting for here is damages?

Mr. Sellers: That is correct.

The Court: The motion is denied.

Mr. Sellers: May I ask your Honor how the fact we are fighting for damages—

The Court: Well, this is purely within the discretion of the court.

Mr. Sellers: Yes, your Honor. On that basis I have nothing to say.

The Court: If I believe the testimony of this witness, here was a plant that was built practically

(Testimony of Vernon Murasko.)

identical to the plant you claim to have a patent on.

Mr. Sellers: That fact was not known to us, of course, your Honor. [459]

The Court: That doesn't make any difference. Your patent wouldn't have been good. You are asking for damages on a patent that from this testimony, if I believe it, was no good.

Mr. Sellers: If you believe this testimony and if this testimony is properly before the court. Whether or not the patent is no good is a question of fact and I would respectfully contend, your Honor, it is our position that this evidence should not be here.

The Court: I thought there was a statement the other day by someone, I don't know who it was, to the effect that there was a patent infringement case on this patent pending in Chicago.

Mr. Sellers: To clarify that, your Honor, there was. It was a case—rather, let's put it this way. This patent, as I understand it—I was not a party to that action, but this patent was involved in a declaratory relief portion of an action back in Chicago, but I think possibly Mr. Denny can answer this question much more accurately than I can, your Honor, because he was there. If you want to know, I will ask him to tell you, your Honor.

The Court: I am interested—don't patents run for 20 years?

Mr. Sellers: 17 years, your Honor.

The Court: 17?

Mr. Sellers: Yes. [460]

(Testimony of Vernon Murasko.)

The Court: I thought it was 20. Wasn't it formerly 20 years?

Mr. Sellers: No, your Honor, not in the recent past. Trade-marks are 20. If you would like to hear about the case back in Chicago——

The Court: No, no. I was under the impression from what was stated here that you were trying to establish the validity of your patent.

Mr. Sellers: We must do that in order to recover, your Honor.

Mr. Lyon: May I call your attention to the fact there was another case filed in this District Court against the Lee Valley Ready-Mix Company, which was settled out of court. The number of that action was one number below or one number above the number assigned to this action, so this patent has been enforced against other parties before its expiration.

Mr. Sellers: I don't say that. I don't mean to imply that, and I wouldn't. The question was whether or not there was a suit pending in Chicago. There was a suit back in Chicago and this patent came in, but it was never adjudicated, as I understand it.

Is that correct?

The Court: Well, I guess maybe I was misled by your complaint, because the prayer of the complaint says, "Wherefore plaintiff prays for a preliminary and final injunction against [461] further infringement."

Mr. Sellers: At the time this complaint was

(Testimony of Vernon Murasko.)

filed, the patent had not expired, your Honor. In other words, it has expired since we filed our complaint. This case has been pending some time. It had about four or five months to run. It was 18 months. I'm sorry.

The Court: I guess that wasn't brought to my attention, because from reading the complaint and reading the prayer, I thought this was an action in which you wanted to establish the validity of the patent and in addition thereto obtain damages for infringement if the patent was valid.

Mr. Sellers: We certainly do want to establish that it was valid, your Honor. Otherwise we are not entitled to damages. But as of this time your Honor will not grant us an injunction because since we filed the complaint the patent has expired.

The Court: Well, this matter is purely within the discretion of the court. I think the court's discretion leads me to the conclusion that the motion should be denied. I think justice demands that your motion should be denied.

Mr. Sellers: Then why do we have that statute? I would respectfully point out to your Honor we have had absolutely no opportunity in this case to take advantage of the rules which ordinarily protect us when given the rights under 28 U.S.C. 282. We have had no chance to go to San Francisco [462] where this man comes from, I understand. We have had no chance to verify what he says.

The Court: If you want to check upon the veracity of this witness and check upon the jobs

(Testimony of Vernon Murasko.)

that he has designated, the time the plant was built, I am satisfied that in San Francisco you will find a building permit for this plant. I presume back in 1931 they had building permits in San Francisco. If you find there was a building permit for this plant in 1931, that would pretty nearly establish the fact. If you want to verify this information, I certainly would give you time to verify it.

Mr. Sellers: Well, in this case, your Honor, we not only have had no opportunity to verify or to bring in our own witnesses. We are given, to be sure, the right to cross-examine which, while helpful at times, is not the complete answer, as your Honor knows. Here, however, I would point out to your Honor that there was a complete lack of diligence upon the part of the——

The Court: Well, I am not defending the defendant in this case on the fact that the defendant couldn't get along with his former counsel. However, I can't penalize a party because he falls out with counsel.

Mr. Sellers: Now, your Honor, I would respectfully point out to you that that is entirely an assumption upon your part in the complete absence of any evidence. [463]

The Court: I have the affidavit of Mr. White saying he couldn't get any co-operation.

Mr. Sellers: But he didn't say he couldn't get along. He said Mr. Stromberg wouldn't come in with him. He didn't say there was a difference of feeling or personal antagonism, which has been

(Testimony of Vernon Murasko.)

suggested. There is a difference, your Honor. If the defendant merely stayed home and either for one reason or another doesn't want to prosecute the suit, he may be very friendly to his attorney, but it is a different matter from personal antagonism and the fact that he is simply not diligent. Your Honor has presumed, I have noticed, that there was a personal antagonism. There is no evidence of that. I don't believe Mr. White's affidavit supports that.

Mr. Lyon: I disagree with you. Mr. White's affidavit said that he and the defendant could not agree on how this case should be defended.

Mr. Sellers: That doesn't show any personal antagonism. I would say Mr. White couldn't agree if the defendant wouldn't come in and help prepare for the trial.

The Court: It seems to me, Mr. Sellers, if I am convinced that here was a plant that was built in San Francisco in 1931, practically the same as the plant as described in your patent, which was filed in 1937, if I am convinced that there was prior use prior to the obtaining or the filing of this patent, it would seem it would be very unjust at this [464] late date to award damages on a patent that I am convinced was illegal and void from the very beginning.

Mr. Sellers: I might point out to you, your Honor, that they had all this time to go into the evidence. This patent has been before the defendant for many months, for over a year, well over a year.

The Court: That is true.

(Testimony of Vernon Murasko.)

Mr. Sellers: I would point out to you, too, that it may be a hardship upon them. Here we have a question of the equities involved, and while the patent may in fact be invalid, I would point out to you a very high percentage of patents are adjudicated invalid and yet many people have paid royalties before that holding is made.

The Court: Many times, you know, it is like paying a traffic ticket. It is easier to pay it than it is to fight it. It doesn't take as much time and effort and money.

Mr. Sellers: You don't mind if I don't agree on the record with that?

The Court: No, you don't have to agree on the record. Maybe you fight a traffic ticket if you think you are right on the question of principle.

Mr. Sellers: I would like to say yes on that, your Honor, but my principles can't afford it.

The Court: That is exactly it. I assume a lot of patent litigation, where it is alleged to be infringed, that the [465] infringer pays off rather than to go to the expense of defending a patent case, because my understanding is patent lawyers come pretty high. It is rather expensive.

Mr. Sellers: I would say from personal experience, your information is misleading, your Honor. That is a matter of personal opinion, of course.

The Court: All right.

Mr. Sellers: Well, your Honor, I know that you have a discretion here and I know you have a right to exercise it. However, I know your Honor will

(Testimony of Vernon Murasko.)

understand if we take exception to your Honor's ruling.

The Court: I have no objection to that. Every case that I decide is subject to appeal. I have absolutely no feeling one way or the other. Attorneys have a right to question my decisions and appeal, and if the Circuit doesn't agree with me, I am perfectly willing to go along with the Circuit.

Mr. Sellers: Thank you, your Honor.

The Court: But your motion is denied.

Mr. Sellers: Thank you. No thanks, but I understand.

Mr. Lyon: Do you have any questions?

The Court: Cross-examine.

Mr. Sellers: Yes. I want to examine this [466] man.

Cross-Examination

By Mr. Sellers:

Q. What was the name of your employer in San Francisco? A. Which one?

Q. The one you were employed by at the time you built the plant.

A. I didn't build the plant. I was there to help install the machinery. My employer was Bode Gravel Company or otherwise designated as Bode Mix Concrete Company.

Q. Who was the head of that plant?

A. The owner, Henry Bode.

Q. How old were you at that time? A. 28.

Q. You were 28 years old? A. Right.

(Testimony of Vernon Murasko.)

Q. This was the first experience you had had in the field of aiding and assisting in the building of batch plants, is that correct? A. Correct.

Q. It was a brand new thing to you?

A. That's right.

Q. You had had no experience with blueprints or drawings before? A. No, I did not.

Q. You were not the engineer in charge of the job. Who [467] did have charge of the job?

A. A man by the name of Harry Davis. He was Henry J. Kaiser's son-in-law.

Q. He had direct charge of this job?

A. He had direct charge of the job, of the complete installation.

Q. And by this job, how do you identify that plant? A. Alabama plant.

Q. The Alabama Street plant?

A. That's right. Alabama, we called it.

Q. And Henry Davis had direct charge?

A. Harry Davis.

Q. How often did you see Harry Davis?

A. Sometimes he would be on the property there three or four times a week.

Q. Did he have the drawings with him when he was there? A. Yes, he did, at times.

Q. Where is Harry Davis now, if you know?

A. Dead.

Q. Who was in charge under Harry Davis in the work on that plant?

A. Various contractors. The wooden structure

(Testimony of Vernon Murasko.)

was sublet to a contractor that I don't recollect the name of.

Q. You don't remember the name?

A. No, I don't, but I do remember the name of the Scale [468] company that installed these loading hoppers, the General Pacific Scale Company at Seventh and Harrison Streets in San Francisco.

Q. The scale company installed the loading hoppers?

A. That's right.

Q. They also installed the scales, did they?

A. That's right.

Q. And they also installed the beams and levers between the hopper and the scales?

A. Yes.

Q. Did you see them do those things, sir?

A. Yes.

Q. Were you there at the plant every day?

A. Yes, at that time I was.

Q. The frame of this building was of wood. How tall was it?

A. 90 feet.

Q. What capacity was the plant?

A. Are you speaking out output?

Q. Well, if I ask you what capacity, what would you speak of, what would you tell me?

A. In my language, the capacity of the plant is how many yards of concrete per hour it can pour.

Q. All right, how many yards of concrete per hour could it pour? [469]

A. The plant was designed for 30 yards of concrete per hour. Under my supervision we built it up to 90.

(Testimony of Vernon Murasko.)

Q. I believe you said that the hoppers were connected by bolts to the ceiling, is that correct?

A. Correct.

Q. If the hoppers were connected by bolts to the ceiling, how did the hoppers move when they were filled with material to be weighed, if they were connected with bolts?

A. The bolts actually were connected to the hopper weigh beams and the hopper was connected to the weigh beams.

Q. Yes, that is what you said.

A. Cantilever effect.

Q. But I want to know if the hopper was connected to the ceiling, how was it movable?

A. The hopper was connected to the scale beams, and the scale beams were connected to the ceiling.

Q. In other words, the hopper was not connected directly to the ceiling, was it? A. Correct.

Q. I am correct? A. That's right.

Q. How close to the ceiling were the hoppers?

A. The cement scale had a clearance of about—the cement hopper had a clearance of six inches from the bottom of the cement tank that held bulk cement. The aggregate [470] hopper had a clearance of approximately three feet from the ceiling.

Q. Were these beams to which these hoppers were connected above or below that ceiling?

A. The beams constituted the floor and the ceiling, also.

Q. All right. Then the levers to which the hop-

(Testimony of Vernon Murasko.)

pers were connected, did you say they were connected to levers?

A. The rods were connected to the scale beams.

Q. The scale beams. Did you have two types of beams, floor beams and——

A. Well, shelf beams is the name they call that part of the scale.

Q. It didn't support the floor, did it?

A. No.

Q. Well, you had a ceiling above the——

A. A ceiling above the two hoppers constituted the floor of the aggregate bins above the two weighing hoppers.

Q. I see, and the ceiling or floor had its own beams, didn't it? A. It did, yes.

Q. All right. Now, were these hoppers connected to the beams of that ceiling or connected——

A. No. They hung in an opening.

Q. Hung in an opening? [471]

A. In an opening in the floor. They did not hang. They were suspended above the opening in the floor.

Q. My question to you is the scale beams, were they positioned above or below the ceiling or floor which is above the hoppers?

A. The scale beams were positioned above the floor of the batching hopper room, but they were positioned horizontal to the cement hopper and the aggregate hopper, and the beams of that scale were connected to the ceiling by bolts.

The Court: Mr. Sellers, I wonder if I could in-

(Testimony of Vernon Murasko.)

interrupt just a minute. I have got something on my mind I want to get straightened out if I can before the morning recess.

Mr. Sellers: Yes, your Honor.

The Court: What is the date of the patent? Is it the date when it is filed?

Mr. Sellers: When it is issued, your Honor, when it is granted or issued.

The Court: When was this issued?

Mr. Sellers: It is in the upper left-hand corner there, your Honor.

The Court: In the patent?

Mr. Sellers: Yes, in the drawing.

The Court: Oh, I see. November, 1938?

Mr. Lyon: That is correct, your Honor. The filing date was February 10, 1937. [472]

The Court: I saw the filing date.

Mr. Sellers: But November 29, 1938, was the date it was granted.

The Court: Then it would expire November 29, 1955.

Mr. Sellers: Expired November 29, 1955.

The Court: I have been misled by the pleadings in this case and also by the pretrial memorandum.

Mr. Sellers: I am terrifically sorry. There was no intention of doing that, I assure you.

The Court: I have been misled, I don't say there was any intention, by your pretrial memorandum. Of course, it was filed in July.

Mr. Sellers: At that time the patent had not expired.

(Testimony of Vernon Murasko.)

The Court: At that time the patent had not expired. Now, the defendant filed a pretrial memorandum.

Mr. Sellers: He filed his just about a week ago.

The Court: That's right, on March 7th.

Mr. Sellers: Of this year.

The Court: Yes, March 7th of this year. The defendant doesn't say anything about that the only issue is the question of damage. Not only that, the defendant says the only issues presented in this action are the questions of the validity of claims 1 and 5.

Mr. Sellers: Well, your Honor—

The Court: Then you filed a reply on March 12, and you [473] don't tell me in your reply of March 12 that the patent has expired and the only thing you are asking for is damages.

Mr. Sellers: Your Honor, had I thought that was important to you, we would certainly have said it, but frankly our reply brief was directed only to the points raised in the brief of the defendant. I don't see at this time just why that concerns your Honor.

The Court: Maybe I made a mistake in not allowing you to make an opening statement. Maybe in your opening statement you would have told me that the patent had expired.

Mr. Sellers: Very willingly, your Honor, because the only difference, as I see it, is whether or not you would grant an injunction. The question of validity is still in issue, and it is in issue whether

(Testimony of Vernon Murasko.)

the patent has expired or not. The only difference is whether or not, having expired, we would no longer ask for an injunction, but that is not really at issue. I don't see that we have misled you upon any material point.

The Court: I am not saying that you have misled me deliberately or intentionally. I am saying that I have been misled because as a general rule before I start the trial of a case I read the pretrial memorandums.

Mr. Sellers: Yes.

The Court: And try to read the cases to determine what the issues are, and when I come out here and say that I have [474] read your memorandum and know what the issues are, I am relying on what is in the file, not on something that happened outside the file.

Mr. Sellers: Nothing has happened outside the file.

The Court: Except that the patent has expired.

Mr. Sellers: There is nothing we could do about that. Our pretrial brief was filed a year ago, last July, and we almost went to trial then, and then the trial coming off now at this time, we didn't file another pretrial memorandum, but opposing counsel did, so his was nearer up to date than ours, and in our reply brief, we only covered the points he mentioned. But I state to you honestly that I don't think the fact that the patent has expired would change the procedure one iota. I don't see why it should.

The Court: Mr. Lyon, when you filed your pre-

(Testimony of Vernon Murasko.)

trial memorandum, did you know the only issue was the question of damage?

Mr. Lyon: Yes, I did. I did not realize that the court was laboring under the apprehension that the patent was still in force.

The Court: I didn't pay much attention to the date of the patent. I assumed that the patent was in force and here was the customary patent litigation in which you are trying to establish the validity of a patent.

Mr. Lyon: I agree with Mr. Sellers in that respect [475] insofar as the validity of the patent is concerned. I don't think the relief that is potentially available has anything to do with it. Possibly it does. The court will make up his own mind there. I should have called your attention to that, but I didn't do it. Frankly, I took a look at it and I didn't realize the court wouldn't see the same thing.

The Court: Well, I don't know if it makes any particular difference as far as the case is concerned, or the outcome of the case, but I do like to keep my eye on the goal we are trying to reach.

Mr. Sellers: But don't you see, your Honor, whether or not you would grant us an injunction, assuming our patent was still alive, would depend on whether or not we asked for it. We might try this case exactly the same way with the patent unexpired and you would give us damages, and if we asked for an injunction, possibly you would give that to us, too.

The Court: But the only thing I have before me

(Testimony of Vernon Murasko.)

is the prayer of the complaint in which you ask for a preliminary and final injunction.

Mr. Sellers: Well, at that time we were entitled to it, but due to the delay, we can no longer get it. I am sorry I didn't cancel that prayer, your Honor, but I don't think that the trial of this case would have varied one iota from what it has.

The Court: I don't think it would, either. I guess I [476] have learned something. Hereafter I better take a look at the expiration date.

Mr. Sellers: I do apologize, your Honor. I think probably Mr. Lyon or I, incidentally, would probably have mentioned the patent had expired, although I am not sure, because I didn't attach much importance to it.

Mr. Lyon: That is going to be my first remark in the concluding argument.

Mr. Sellers: I knew you were going to make a good speech.

The Court: Well, I wanted to be sure. I am not saying that this—what I am trying to say is this is a natural mistake that could happen in any litigation and I don't want anyone to think from what I have said that I am criticizing either attorney or the litigants because I think the court is as much at fault as anybody else.

Mr. Sellers: I am very sorry.

The Court: I think the court is more at fault than anyone else, because I should have allowed you to make an opening statement, but I assumed all the issues had been presented and all the material

(Testimony of Vernon Murasko.)

facts and issues had been presented in the allegations of the complaint and the pretrial memorandum, and all that we are trying to do here is to present the evidence to sustain the allegations.

Mr. Sellers: But, your Honor, I do repeat, because I am [477] afraid you don't quite see the picture on this point, that is, you still have to sustain the validity, whether it has expired or not. How can you award damages if you don't sustain the validity?

The Court: Well, I will have to sustain the validity up to the date of expiration.

Mr. Sellers: That is true, your Honor, but the testimony here all goes back years before that. What happened since the expiration doesn't get into this picture.

The Court: Well, we will take our morning recess now. We will recess until 10 minutes after 11:00.

(Recess.)

The Court: You may proceed.

Q. (By Mr. Sellers): Is that the first plant that you had ever seen of the type having the cement hopper in the center between the portions of the aggregate hopper? A. It was not.

Q. You had seen plants like that even earlier?

A. I had, in 1930.

Q. Where had you seen that?

A. In San Francisco. The plant was located at Geneva Avenue and Tara Street.

(Testimony of Vernon Murasko.)

Q. By whom was that plant owned?

A. By the same company, Bode Gravel Company or Bode Ready-Mix Concrete. [478]

Q. They had two plants, I take it, of the same type, after they built this one?

A. Two plants that accomplished the same purpose, constructed a little differently.

Q. Did the same manufacturer or builder build both plants?

A. The wooden structure was built by the company that owned the Bode Gravel Company. The cement hopper and aggregate hopper were built by the Western Pipe & Steel Company of South San Francisco.

Q. When were you first contacted in this matter? By whom? A. In what way?

Q. I want to know who made contact with you to come here to testify in this case?

A. Mr. Stromberg of the California Batching Company.

Q. How long have you known Mr. Stromberg?

A. Oh, I have known him probably for three years, probably have met him three times in three years.

Q. You are engaged in business at the present time here in Southern California?

A. That's right. I am not in business. I am working for the Western Concrete Company.

Q. Do you have business contacts with Mr. Stromberg? A. No, I don't. [479]

Q. Social contacts? A. No, I don't.

(Testimony of Vernon Murasko.)

Q. How did Mr. Stromberg happen to know you had contact with this type of plant?

A. Well, he is a competitor of the company that builds plants, fabricates them for the Western Concrete Company, and he is in there looking for business and speaking to responsible people working there that may help him.

Q. Did he ask you if you ever knew of a plant like that some time ago? A. No, he didn't.

Q. How did you happen to tell him?

A. Well, that would entail a story. I can't give you an answer on that.

Q. Well, can you make the story short?

A. Mr. Stromberg contacted a man who used to work for me from 1934 to 1942, when I left San Francisco, that operated this plant after I had left, and probably for six years before I had left there. He was called down here for a witness for Mr. Stromberg and happened to mention my name. It happened Mr. Stromberg happened to know me. I have not seen this gentleman in particular for three years. I have seen him twice since 1942.

Q. What was his name?

A. Ed Cornett. [480]

Q. Where is he now?

A. Present in this room.

Mr. Lyon: He will be our next witness.

Mr. Sellers: Thank you.

Q. This plant was operated by you for what period of time?

A. 1931 until I left in 1942, May.

(Testimony of Vernon Murasko.)

Q. Did it operate satisfactorily during that entire time? A. Very satisfactorily.

Q. You rather prefer the type of plant having the central cement between the aggregates?

A. Not necessarily, personally.

Mr. Sellers: That's all, your Honor. Your Honor, may I at this time say that in making my motion to strike, I said 28 U.S.C. 282, rather than 25 U.S.C. May I correct that?

The Court: It may be corrected.

Mr. Sellers: Thank you.

Mr. Lyon: That's all.

The Court: You may step down.

(Witness excused.)

The Court: Call your next witness.

Mr. Lyon: Mr. Cornett.

Your Honor, I didn't get this marked and put in [481] evidence. Can I recall the witness?

The Court: No, you don't have to do that.

Mr. Lyon: He has already identified it. May I have this marked next in order?

The Court: It may be marked.

The Clerk: For identification?

The Court: No, in evidence.

The Clerk: Exhibit E.

(The exhibit referred to was received in evidence and marked as Defendant's Exhibit E.)

Mr. Sellers: I wish to object to that, your Honor, as being part of the record of the testimony of a witness who should not have testified in our opinion.

The Court: Overruled.

Mr. Sellers: I would also like to object to it upon the further ground that—no, I cancel that.

E. F. CORNETT

called as a witness by and on behalf of the defendants, having been first duly sworn, was examined and testified as follows:

The Clerk: Will you state your name, please?

The Witness: E. F. Cornett.

The Clerk: Will you spell your last name?

The Witness: C-o-r-n-e-t-t. [482]

Direct Examination

By Mr. Lyon:

Q. What is your age, Mr. Cornett? A. 53.

Q. What is your present occupation?

A. I am working for M & K Corporation on a skiploader.

Q. Where is that organization located?

A. In San Francisco.

Q. Who was your employer in 1929?

A. In 1929 I was working in the foundry business.

Q. And in 1930?

A. 1930, the latter part of 1930, I went to work for Bode Gravel Company.

Q. How long did you work for the Bode Gravel Company?

A. Well, I worked there for approximately a year, and we were off during the depression. I come back in the latter part of 1932.

(Testimony of E. F. Cornett.)

Q. What did you do in 1932? What were your duties?

A. I was driving a truck for a while.

Q. How long did you drive a truck, sir?

A. Approximately two years all told.

Q. At the conclusion of your truck driving, what duties did you then undertake?

A. I was broken in as plant operator.

Q. At what plant, sir? [483]

A. The Alabama Street plant.

Q. What year was this? A. 1933.

Q. 1933. How do you fix that year, sir?

A. Well, I know the year. I couldn't give you the exact month or date, but I know the year I went into the plant.

The Court: How do you know it?

Q. (By Mr. Lyon): How do you fix it as 1933?

A. Because I absolutely know it.

Q. Was there any construction work or anything of that type going on around the area which would help fix your memory on that?

A. I think I could recall the Federal Building about that time being built.

Q. The plant that you were operating in 1933, that was this Alabama Street plant?

A. That is correct.

Q. How much of your time was spent operating that plant? A. 1933 to 1947.

Q. Continually? A. Yes, sir.

Q. Did you have other duties besides the operation of this plant? [484] A. No, sir.

(Testimony of E. F. Cornett.)

Q. That's all you did do, was operate the plant?

A. That's right, a plant operator.

Q. How was the Alabama plant constructed with reference to its aggregate hopper and its cement hopper?

A. We had a large aggregate hopper and we had a center cone with a cement scale inside the center cone to protect the cement scale.

Q. What weighing mechanisms were used?

A. You mean the scales?

Q. Yes. A. We had cumulative weights.

Q. Did you have more than one?

A. We had a cement scale plus the aggregate scale.

Q. You had one scale attached to the cement hopper and a second scale attached to the aggregate hopper? A. Yes.

Q. Was the cement hopper positioned physically within the aggregate hopper? A. Definitely.

Q. I show you Defendant's Exhibit E, which is a sketch made by Mr. Murasko, and ask you if in accordance with your recollection that is an accurate sketch of the Alabama plant?

A. It is about as accurate as you could make it.

Q. Would you have any changes or corrections you would [485] like to make to that?

A. No, I wouldn't, because it is exactly as he drew it. I know it very well from memory because I have done plenty of repair work on it.

Q. Have you ever helped reconstruct this plant?

A. Just repair work.

(Testimony of E. F. Cornett.)

Q. What do you mean by repair work?

A. If something would wear out or something would go wrong.

Q. Did the cement hopper, for example, ever need replacement?

A. No. We never had to replace the cement hopper. We repaired the lower gates, slide gates, several times.

Q. The gates at the bottom of the hopper?

A. Yes. It would wear a little bit and that would be a replacement there.

Q. Would you do that replacement yourself?

A. We would generally have a welder in and I would assist him.

Q. So you have watched him actually get down in there and put the gate on the bottom of this cement hopper?

A. Right.

Q. Would you describe for me the operation of the Alabama Street plant during the charging and the batching of cement? [486]

A. Of cement?

Q. Of concrete. Pardon me. Using this drawing as a basis for illustration.

A. Well, we would weigh up our water.

Q. Where would you weigh that water?

A. We had a regular water valve there and we would weigh it on the aggregate scale.

Q. Yes, but whereabouts on this drawing, what element?

A. It would be right over in here.

Q. At G?

A. He hasn't got the way the valves are fixed.

(Testimony of E. F. Cornett.)

Mr. Sellers: I suggest he let the witness answer the question.

Mr. Lyon: He has been pointing at it and all I am doing is get him to——

The Witness: It is right here.

Q. (By Mr. Lyon): How is that designated on the drawing, what letter? A. G.

Q. After you have poured the water in there and weighed it, what is the next step?

A. You hit your cement button and you would start weighing aggregate.

Q. Just a moment. We don't know as much about these plants as you do, so if you can describe it in language that [487] we can understand, it will help.

A. You push your cement button and your cement would start being weighed.

Q. Where is your cement beforehand?

A. It is up in the tank above the center hopper.

Q. Is that on this drawing?

A. Right there.

Q. That is designated what? A. H.

Q. So you would open the hopper H and permit your cement to flow? A. Yes.

Q. And it would flow down where?

A. Into the cement scale.

Q. The cement hopper? A. Yes.

Q. And that is designated on this drawing what?

A. B.

Q. That is the gate. A. D.

Q. Now, at the same time or at a different time.

(Testimony of E. F. Cornett.)

would you empty aggregate into the aggregate hopper?

A. At the same time the cement was being weighed, you could also weigh your aggregate.

Q. Each one of these hoppers weighed independently of [488] the other? A. Yes, sir.

Q. They were suspended from their own separate scales? A. That is correct.

Q. When you had the appropriate amount of cement in the cement hopper and the appropriate amount of aggregate in the aggregate hopper, then what would you do?

A. You would throw your water valve, let your water start running in the mixer, and naturally your mixer is turning over, and then you would open your aggregate gate, and as soon as your aggregate started flowing, you would open the cement gate and the cement would go down the chute into the mixer.

Q. Now, during the discharge of the mechanism, what was the disposition of the cement with respect to the aggregate, if you understand what I mean?

A. It flowed right down with the aggregate.

Q. Flowed in the middle of it?

A. Right about the middle of it.

Q. So that the shaft of cement that was discharged was surrounded completely with aggregate?

A. That's right, at the bottom of this hopper you would have a big V chute that went down into the mixer. It was wide at the top and narrowed down, and the cement would hit it about three-

(Testimony of E. F. Cornett.)

quarters of the way up and go right in with [489] the aggregate.

Q. And this was the condition in which the plant was operating in 1933 when you assumed it?

A. That's right.

Q. It has operated in that fashion until when?

A. Until 1947.

Q. What happened in 1947 to the plant?

A. It started to disintegrate and they decided not to rebuild. They made other arrangements for procuring their cement, so they just naturally tore it down.

Q. You have no idea where the remnants of this plant are at the present time?

A. They went to the junk yard as scrap.

Q. Were you familiar with any other plants similar to this prior to 1937?

A. Yes. We had a plant at Geneva and Tara.

Q. Was that constructed in the same manner as this? A. A little differently.

Q. How was this constructed differently?

A. Your cement scale, instead of being right in the center, was more or less to the side, but it was inside the aggregate hopper. Don't ask me to make a drawing. I can't draw.

Q. Can you do this well?

A. I don't know. [490]

Q. Can you try? Give me an outline.

A. We had a hopper like this, see, and then your cement scale was just anchored inside like

(Testimony of E. F. Cornett.)

this, and you had a gate here and you proceeded with the same operation identically.

Q. It operated in the same way?

A. Yes. The only thing is your cement scale was off to one side, and instead of being a cone shape, it was more or less a box shape. It come down in a V to empty out, you know. It was a scale within a scale like this one.

Q. Or a hopper within a hopper, rather?

A. Or a hopper within a hopper.

Q. The scales are outside the aggregate hopper?

A. No. In both plants the scale was inside the aggregate hopper.

Q. The cement scale was inside?

A. The cement hopper was inside the aggregate hopper.

Q. I am talking about the scales.

A. Oh, the scales. They would be outside and you would be standing alongside your bank of valves facing the scales.

Q. And from one scale the cement hopper was suspended and from the other scale the aggregate hopper was suspended?

A. That's right.

Mr. Lyon: That's all. [491]

Cross-Examination

By Mr. Sellers:

Q. You worked in this one plant from 1933 to 1947?

A. That's right.

Q. Did you ever take any pictures of it?

A. I had no reason to take any pictures.

(Testimony of E. F. Cornett.)

Q. No reason to take pictures. Have you worked in any other plant since that time?

A. No. I got out when they tore down the plant, I got out of the cement business and went in outside construction.

Q. Isn't it a fact that while you were there you were working with or under the preceding witness?

A. That is correct. He was my superintendent.

Q. Did that plant work satisfactorily?

A. Very much so.

Q. You fixed the date at 1933?

A. That is correct, when I started to operate.

Q. When you started to operate. How did you fix 1933? Couldn't it just as well have been 1934 or 1935?

A. No, because there is no way for me to explain or tell you, but I absolutely know it was 1933.

Q. Well, what else do you know happened in that particular year?

A. That was the start of the Federal Building, wasn't it, in 1933, in San Francisco? [492]

Q. I don't know. What other buildings started that year?

A. I don't remember. I was just the mixer man upstairs and I had nothing to do with any other part of the business. They would call for a mix and I would mix it up, and that's all I know.

Q. Well, you were putting out cement or concrete, but when was this? In other words, how do you know that it was 1933, or maybe it was 1930? How can you be sure it wasn't in 1930?

(Testimony of E. F. Cornett.)

A. Because it wasn't. The plant wasn't built in 1930.

Q. When was it built? A. 1931.

Q. How do you know that?

A. I was driving a truck.

Q. What is there about 1931 in particular that you can fix in your memory?

A. I knew they were building this plant, but I had nothing to do with it.

Q. You were driving a truck in 1930, weren't you? A. Part of it.

Q. In 1929?

A. 1929, I was in the foundry business.

Q. What were you doing in 1932?

A. I worked part of that year with the Bode Gravel Company, [493] and I went with the U. S. Engineering Department for six months, because things were pretty tough, and I had an opportunity to go with the U. S. Engineers Department on the dredge McKenzie.

Q. Where was that located?

A. In San Francisco being repaired. We went up to Aberdeen, Washington, to dredge.

Q. You know that happened in 1933?

A. No. 1932.

Q. Could it have happened in 1933?

A. When I come back off the dredge, that is one reason I can say it was 1933. I was gone six months and I came back and worked for Bode.

Q. You were gone six months?

A. That's right.

(Testimony of E. F. Cornett.)

Q. How do you know that that six months you were on the dredge was in 1933? A. 1932.

Q. I beg your pardon.

A. 1932. Because I have a discharge to prove it, but I don't have it with me.

Q. Do you have anything else that might be used to prove it was in 1932 that you were on the dredge? A. My discharge will prove it.

Q. Anything else? [494]

A. Oh, if you would get hold of the first assistant engineer on the dredge McKenzie, he would verify it.

Q. In addition to that, is there anything else that would tend to fix 1933 in your mind as the time when the plant was built?

A. When the plant was built?

Q. Yes.

A. I was driving a truck when the plant was being built in 1931.

Q. I beg your pardon. You went to work at the plant?

A. I went to work at the plant as the mixer man, as an operator, in 1933.

Q. Anything else to fix that date?

A. I just come in off that dredge and went back to work for Bode Gravel.

Q. Anything else? A. That's all.

Q. You have nothing to establish the date on which you were on the dredge other than the discharge, which you don't have with you?

(Testimony of E. F. Cornett.)

A. No.

Q. What were you doing in the year 1934?

A. I was operating the mixer.

Q. What were you doing in addition to operating the mixer there? Did you have any other activities? Did you [495] go anywhere, take any trip?

A. Not that I recall.

Q. How about 1935? When was the World's Fair in San Francisco? Didn't they have a fair about that time? A. 1939.

Q. Did you go anywhere in 1936?

A. Yes. I took a month off and I went to British Columbia.

Q. In 1936? A. That's right.

Q. How do you fix that as 1936 and not 1935?

A. Because I know it was 1936. I didn't keep my steamship tickets to prove it, but I know it was 1936.

Q. And in 1937 where were you?

A. I was working for Bode Gravel.

Q. What did you do in addition to working for them? A. Nothing.

Q. Did you take any trips that year?

A. No, sir.

Q. Are you sure that the trip you took couldn't have been in 1937 and not in 1936?

A. It was in 1936 when I made the trip to British Columbia.

Q. You believe you remember that, but what can you tie it up with that we know happened? [496]

A. I took a month off and took a trip.

Q. While you were on that trip, did anything

(Testimony of E. F. Cornett.)

happen that the public in general would know or that you could verify?

A. You could verify it by the then mayor of Vancouver, who was my uncle.

Q. Well, what happened to the mayor of Vancouver at that time, what happened?

A. He entertained us.

Q. He detained you?

A. He entertained us.

Q. Oh, entertained you. Was that Vancouver, British Columbia?

A. B. C.

Mr. Sellers: Well, I don't know, your Honor, whether that makes that a public record.

Q. Outside of these trips which you took, which you simply remember the date you took them, you have nothing else to pinpoint the time you went to work at this plant?

A. That's right.

Q. Prior to the time you went to work there, you had never seen the interior of the plant, you didn't know how it was made?

A. No.

Q. Your knowledge of its construction came beginning in [497] 1933?

A. That is correct.

Q. And you were there from 1933 to 1947. That was a long time, wasn't it?

A. That is correct.

Q. That would be a total of 14 years.

A. Right.

Q. Did you ever figure up it was 14 years?

A. Did I ever figure it up?

Q. Yes, did you ever stop to figure you worked on that one job for 14 years?

(Testimony of E. F. Cornett.)

A. That's easy to figure. There is no point in trying to remember it. The main thing is I was getting paid.

Q. Well, I appreciate that, but I mean had you ever said to anyone yesterday or the day before, "I was with that company 14 years when I left"? Had that 14 year figure ever stood out in your mind?

A. Oh, yes, but I don't remember bragging about it.

Q. Who did you ever tell you were with the company for 14 years?

A. I don't remember telling anyone especially. Mr. Murasko can verify it.

Q. When did Mr. Murasko leave that plant?

A. I think it was 1942.

Q. He left in 1942? [498]

A. I think that was the date.

Q. So during what period of time would you have been working with Mr. Murasko?

A. Well, from 1933 on as plant operator, until he left the company.

Q. Between the years 1933 and 1942, you and he were at the same plant? A. Yes.

Q. You are familiar with the gate at the bottom of the hoppers in that plant, were you?

A. Yes, sir.

Q. Now, referring particularly to the aggregate hopper, what kind of gate construction did you have there? A. A knife type gate.

Q. A knife type gate?

A. Sliding gate, flat sliding gate.

(Testimony of E. F. Cornett.)

Q. It was a gate that slid horizontally from one side to the other?

A. Just worked back and forth on an air ram.

Q. Was there more than one gate in the bottom of the aggregate hopper? A. No, sir.

Q. Just one gate? A. That's all.

Q. Did it cover the entire bottom of the aggregate hopper? [499] A. No, sir.

Q. Just one gate? A. That's all.

Q. Did it cover the entire bottom of the aggregate hopper? A. Yes, sir.

Q. How many gates did you have on the cement hopper? A. One.

Q. That was positioned above the position of the aggregate hopper gate?

A. That's right.

Q. Centrally of it? A. That's right.

Q. I believe you said, Mr. Cornett, that the cement would hit the aggregate three-quarters of the way up, were those your words?

A. I beg your pardon?

Q. Did you say that the cement would hit the aggregate three-quarters of the way up?

A. Approximately three-quarters of the way up from this back chute as it would be entering the mixer.

Q. What did you mean by that?

A. Well, you had a chute under this scale hopper going into the mixer, and naturally you wouldn't have it right at the bitter edge. You would want a

(Testimony of E. F. Cornett.)

little leeway for spillage, [500] so it would hit approximately three-quarters of the way.

Q. Well, wait. Didn't the aggregate—how wide, looking at this drawing that you have before you here, Defendants' Exhibit E, do you remember how wide was this hopper from one side to the other? I am referring to the aggregate hopper.

A. Offhand, I don't remember. It was quite a good sized hopper, but I never took the trouble to measure it.

Q. Was it five feet wide?

A. It was more than that.

Q. Was it 10 feet wide?

A. Approximately eight.

Q. Approximately eight feet wide?

A. I would say approximately eight feet wide.

Q. If it was eight feet wide, how wide was it in the other dimension? A. The same thing.

Q. It was a square hopper?

A. A square hopper.

Q. About eight feet on each side?

A. Right.

Q. Now, how big was the gate at the bottom of the hopper, the discharge outlet?

A. I knew I measured it lots of times, but I don't remember offhand the exact measurements of it.

Q. You measured it a lot of times? [501]

A. Oh, yes. We had to replace it when it would wear, but offhand I don't remember the measurements.

(Testimony of E. F. Cornett.)

Q. You had baffles inside of your outside aggregate hopper, according to this drawing?

A. Right.

Q. And they extended down almost to the sliding gate, did they not?

A. Yes, somewhere along in that spot there, so that the aggregate could by-pass.

Q. You mean as shown here they extend too far?

A. No.

Q. They extended down just about as far as in this drawing?

A. That is correct.

Q. Now, did you have any chance for the aggregate to collect in the bottom of this hopper above the gate? Did that happen?

A. You mean the aggregates collected at the cement gate?

Q. No, collecting above the aggregate gate and below the cement gate, did that happen in your construction?

A. Oh, yes.

Q. In other words, you formed a body of aggregate across above the gate?

A. That's right. [502]

Q. Is that the way it worked?

A. Yes.

Q. And then when this was discharging, about how wide, if you remember, were the actual passages through which the aggregate went down?

A. The bottom was about a foot and a half.

Q. A foot and a half wide on each side of the cement hopper?

A. That's right.

Q. Did you ever notice whether or not the aggregate in discharging down from the aggregate

(Testimony of E. F. Cornett.)

hopper from the two sides would actually come together to form a solid stream of aggregate? Did you ever notice that?

A. Oh, yes. It would come out as a solid stream.

Q. Where did you stand when you saw that?

A. I have been there—I have been relieved lots of times and lots of times we would have to go right through lunch on certain jobs and I could stand and watch the operation on my relief.

Q. Was the fall of the aggregate in the cement in a position exposed so you could see it from the outside? A. Yes.

Q. All you saw from the outside was the falling aggregate. You didn't know whether it was extending clear across or not, did you? [503]

A. Sure.

Q. How did you know?

A. Because I had eyes.

Q. But if you are looking at a wall of aggregate falling, can you be sure that that wall is solid for one foot or for four feet?

A. Solid for the full width of that hopper.

Q. How did you know that?

A. Because I observed it.

Q. You observed it as it was falling, but you were at the side of the aggregate fall, weren't you?

A. I was behind it.

Q. You were behind it? A. That's right.

Q. You were off to one side?

A. I was right behind it as it went straight down.

(Testimony of E. F. Cornett.)

Q. Behind it, off at one side about on the same horizontal level?

A. I was standing on the platform there and you could see it go down very plainly.

Q. Well, what I want to learn is whether or not the cement falling out from your cement hopper fell into the streams of aggregate falling from the aggregate hopper?

A. No, it did not.

Q. It did not? [504]

A. It went directly into the mixer.

Q. The cement fell down between the streams of aggregate into the mixer?

A. That is correct.

Q. How far was it between the stream of aggregate and the stream of cement then?

A. What do you mean, how far?

Q. What was the distance? Was it one foot or two feet or three feet or what was the distance?

A. They came out together.

Q. Oh, I beg your pardon.

A. The cement fell right down in here and came out with the aggregate.

Q. They came out together, but you have said now that the stream of aggregate upon the two sides of the cement were spaced from the stream of cement and that it came down between the two streams by itself.

A. You would open this aggregate gate first, leaving a void for the cement to come through on.

(Testimony of E. F. Cornett.)

Q. All right. Now, my question is, we have two streams of aggregate coming down from these two sides? A. That's right.

Q. All right. Now, we have two streams of aggregate coming down like this, and then spaced in between the streams of aggregate we have a stream of cement, is that correct? [505]

A. No. The aggregate would come down and spread out in this chute and your cement fell directly on the aggregate.

Q. As I understand what you just said, the aggregate comes out the bottom of this side over here and falls down, and the aggregate comes down the bottom of this side over here and falls down, and the cement falls down between the two, but the cement, you have said, does not fall into the aggregate, it falls down between the two, is that right?

A. You open this gate first and your aggregate comes out and spreads into the back chute, and then you open your cement gate and the back chute is full of aggregate and the cement goes right down into it.

Q. All right. When it gets down there into the back chute, or whatever it hits down here, they all fall together? A. Yes.

Q. I am referring to right here, before they hit anything, without falling down here, they haven't hit anything yet, the aggregate is falling down on both sides and the cement is falling down in the

(Testimony of E. F. Cornett.)

center. Now, my question is whether or not the cement falls or strikes the aggregate or whether, as you have said before, you don't have two streams of aggregate with the cement positioned in between the two.

A. As I have explained, your aggregate is spread out on the chute.

Q. No, no. [506]

A. Your aggregate is spread out on this back chute and the cement follows right through with it, to make a——

Mr. Lyon: Your Honor, may we have one counsel interrogating the witness instead of two?

The Court: I assume that is proper.

Mr. Sellers: May I talk to counsel, your Honor?

The Court: Yes.

Mr. Sellers: I don't believe he has been asking any questions.

Mr. Lyon: No, but I think his presence might make the witness uneasy.

Mr. Sellers: Thank you.

Q. We have four compartments. It has been described that the aggregate compartment, aggregate hopper, is comprised of four separate compartments, is that correct?

A. Yes, with fins in there for the reinforcement.

Q. Four aggregate hoppers. As a matter of fact, then, these walls that divided these four hoppers were down here at the side. This is one of the walls we see right here. That means if there was aggregate in this one side over here and you discharged—

(Testimony of E. F. Cornett.)

well, let me ask you. Did you always discharge these four hoppers simultaneously? A. Yes.

Q. All four aggregate hoppers simultaneously?

A. Yes, sir. [507]

Q. Why did you discharge them at one time?

A. Because they all went in at one time. You might put in one size at one time and put in another size at another time, and one size at another, and they all go to make the concrete.

Q. I see. Where did you have your sand here, in which hopper? A. Right here.

Q. The hopper over in the corner, this hopper?

A. No. That diagram is the top view of the hopper.

Q. All right. This is the top view of the hopper. I am looking at the top view of the hopper. What is in the hopper that I am looking at the top view of right here, this hopper?

A. That is where the aggregate is, your rock, sand——

Q. What is in this section over here?

A. That is rock or sand, either one.

Q. Wouldn't you put sand in one and rock in the other? A. That's right.

Q. Then we could put sand here and rock here and sand here and gravel here, is that the idea?

A. Yes.

Q. And cement in the center?

A. That's right.

Q. Do I understand that these all came down and rested [508] upon the single gate here at the bot-

(Testimony of E. F. Cornett.)

tom, is that correct? A. That is correct.

Q. Then when you would open that gate, it would all go down together?

A. That's right.

Q. I have a pencil here with red, if I may add to Mr. Lyon's Exhibit E. Would you please, with this red pencil, make a mark down wherever you believe the cement would strike the aggregate. You have said the cement would fall into the aggregate. Where would that be?

A. Right in the center, coming right down through the center.

Q. It comes down through the center. Is the aggregate over in the center, too? A. Yes, sir.

Q. Or didn't you say the aggregate fell down the stream here, and the stream over here, with the cement in between?

A. They spread out in a chute and there is one wide pattern.

Q. Well, wait a minute. This is right below the gate, isn't it? Isn't the chute you are talking about a chute spaced down below a ways?

A. Yes.

Q. Let's not go down to that chute. Let's stay at the gate. [509]

A. The chute is far enough that it takes the fall and spreads.

Q. Let me see whether or not this would help any. Here is the outside hopper and here is the cement hopper, let us say. Isn't it a fact that you

(Testimony of E. F. Cornett.)

have down below here a hopper in which this falls, a chute which goes something like this, and the gravel and rock and the cement fall down into this chute and this is where they mix, is that correct?

A. That is where they come to the mixer.

Q. Yes. This is where they first strike. In your construction, did they strike up here at the top? Did they intermingle or mix right here at the gate?

A. Not until the chute.

Q. Not until they hit way down here?

A. Yes.

Q. So in the construction of your plant, the actual mixing of the cement and the aggregate took place at a point I am going to mark X on this drawing I have just made, is that correct?

A. That's right.

Q. Now, how steep was the slope of these side walls here? I am going to mark the outside walls of the aggregate hopper Y.

A. Offhand, I don't remember.

Q. Well, you remember everything else about this, why [510] don't you remember that?

A. I don't remember the pitch of them. They were pitched, but I don't know exactly the pitch.

Q. But stop and think about it now.

A. I can't answer the question.

Q. You just don't know how steep they were?

A. That's right.

Q. And the cement was in the center, so let's assume the outside walls of this aggregate hopper are just about as I have shown them in this drawing. Is

(Testimony of E. F. Cornett.)

that about right? A. Not quite right.

Q. How would you like to change it?

A. They are more like this. They come down and they curve in here.

Q. About what pitch do you say they would be? If you didn't have the drawing in front of you, what pitch would you say they should be?

A. I don't know what the pitch is.

Q. Can you indicate on my drawing here how they should be arranged, what angle?

A. That is not a drawing of it at all.

Q. Not even a diagrammatic showing?

A. No.

Q. We will make it a little more complete. We will put a gate down here at the bottom. Here is your gate, which I [511] will label G, and we will put a gate here at the bottom of the cement hopper, which I will label H, and we will label the interior cement hopper J. Now, do you recognize that as being—well, I will run these baffles a little bit further. Do you recognize that as being something which would be considered an aggregate hopper on the outside here and a cement hopper J on the inside there?

A. It is not designed like that drawing.

Q. It is not designed like that?

A. Not the aggregate hopper.

Q. How would you like to change it?

A. (Indicating.)

Q. You have marked another line. The line you have just put on I will mark K and run two lines

(Testimony of E. F. Cornett.)

up to the reference character K to indicate two lines. Well, do I understand that the bottom of the aggregate hopper then extended almost flat across to the gate?

A. No. I got it a little bit too much. It would come down on an angle.

Q. On an angle.

A. To freely empty the hopper.

Q. To freely empty the hopper, but you have stated that the—you have stated both ways, I believe—no, you have been consistent. You have said that the cement coming out of the cement hopper would not mix with the aggregate coming out [512] of the aggregate hopper until they strike at the point X down here, is that correct?

A. Correct.

Q. So that up here in the hopper itself, at the discharge of the, shall we say, the hoppers, there is no mixing action takes place up there? Is it not also a fact that in the operation of this unit you would frequently discharge the aggregate into the weighing receptacle down here, which I shall call L, and put that reference character on it—is it not a fact that you would frequently discharge the aggregate down into L, and then after it has reached down to L, then discharge the cement on it?

A. Always did that.

Q. That is the way you always did it. Why did you always do it that way?

A. So that your cement wouldn't stick up on this chute here. You would have a flow of cement

(Testimony of E. F. Cornett.)

on your aggregates. You always open the aggregate gate first.

Q. Let your aggregate out, and then you let the aggregate collect at the chute at the bottom?

A. Yes.

Q. After it had all fallen out, then you——

A. Not all.

Q. How much? A. Very little. [513]

Q. How much?

A. Oh, it would be—say if you are batching two and a half yards, maybe let a quarter yard go down before you tip your cement gate, just enough to cover it so that the cement would stick to it.

Q. In other words, you partially discharge your aggregate hopper up here and then having partially discharged it, thereafter you open the cement, and do I understand you to say that you didn't completely discharge the aggregate before you discharge your cement? A. That's right.

Q. You don't want to say that now?

A. No, a small portion of it.

Q. A small portion of it, and therefore as far as the latter portion is concerned, the two of them went down together?

A. That is correct.

Q. But the fact was that the cement was spaced between the lines of flow of the aggregate and the mixing action took place down in the collector hopper or the chute down below?

A. That's right.

Mr. Sellers: I would like to mark this drawing

(Testimony of E. F. Cornett.)

that I have made rather crudely as Plaintiff's Exhibit No. 20.

The Court: It may be marked.

The Clerk: Plaintiff's Exhibit 20 for identification. [514]

(The drawing referred to was marked as Plaintiff's Exhibit No. 20 for identification.)

Mr. Sellers: Now I would like to offer it in evidence.

The Court: It may be received in evidence.

The Clerk: No. 20 in evidence.

(The drawing referred to was received in evidence as Plaintiff's Exhibit No. 20.)

Mr. Sellers: I wonder, your Honor, if we may have the recess now.

The Court: All right.

Mr. Sellers: Thank you, your Honor.

The Court: Court will stand in recess until 2:00 o'clock this afternoon.

(Thereupon, a recess was taken to 2:00 o'clock p.m.) [515]

Friday, March 16, 1956—2:00 P.M.

Mr. Sellers: Your Honor, I want you to know that we tried to get together and we came a little close, but we weren't successful.

The Court: Well, maybe I can say something that might throw some different light upon the

(Testimony of E. F. Cornett.)

situation. You made an objection to the introduction of evidence upon the ground that you hadn't received proper notice.

Mr. Sellers: That is correct, your Honor.

The Court: As I read the statute, it can be received by the court in its discretion upon what terms he deems best.

Mr. Sellers: I think that is correct, your Honor.

The Court: It is my anticipation if I find in favor of the defendant in this case, that I will not allow the defendant costs, so I am just throwing that in, that inasmuch as the defendant has had an advantage which he could very easily be deprived of, an advantage which, at this case has developed, is a very material advantage, I think it is only fair that he be penalized to the extent that he wouldn't be allowed to recover his costs. I have not made any ruling yet, but I am just telling you what I am anticipating doing.

Mr. Sellers: That the defendant would be entitled to recover costs?

The Court: Would not be entitled to recover costs. In [516] other words, each side will take care of their own costs.

Mr. Sellers: In the event this case proceeds, each side will bear its own costs.

The Court: In the event this case proceeds and judgment is rendered for the defendant, each side will bear its own costs.

Mr. Sellers: Well, I think that would be fair and equitable.

(Testimony of E. F. Cornett.)

The Court: So if the question of costs is involved, you can forget the question of costs right now.

Mr. Sellers: Does that make any difference to you, Mr. Lyon?

Mr. Lyon: Not a bit.

The Court: Also, I might indicate to counsel I anticipated this case would finish today. From the present indication, if the case goes on, it will not finish today, so I will have to continue the case until Thursday or Friday of next week. In the meantime, that will give you an opportunity to investigate the situation in San Francisco.

Mr. Sellers: Thursday and Friday and next Monday following, I will be in Philadelphia and New York taking depositions.

Mr. Lyon: May it please the court, I have one witness I can get through with in a half or three-quarters of an hour and we will be through.

Mr. Sellers: I am not through with this man yet. [517]

Mr. Lyon: It depends on how much time you want.

The Court: You may proceed. I am going to have to stop promptly at 4:00 o'clock, so we won't take any recess until 4:00 o'clock now.

Mr. Lyon: Your Honor, may I make this suggestion? Mr. Bodinson, the owner of the Bodinson Manufacturing Company, has been kind enough to come down here to testify on our behalf, and he cannot remain after Friday.

(Testimony of E. F. Cornett.)

The Court: This is Friday.

Mr. Lyon: That's right. Can I take him out of order to insure I get him in this afternoon?

The Court: I have no objection. Will you relinquish this witness temporarily?

Mr. Sellers: I will leave that to Mr. Denny. Do you prefer to proceed with him or are you willing to have him step down?

Mr. Denny: I don't think it makes any difference.

Mr. Sellers: What do you want to do?

Mr. Denny: Let's defer to their request.

Mr. Sellers: All right. You may step down.

(Witness withdrawn.)

The Court: Call the next witness.

Mr. Lyon: Mr. Bodinson. [518]

FRED W. BODINSON

called as a witness by and on behalf of the defendants herein, having been first duly sworn, was examined and testified as follows:

The Clerk: Will you please state your name.

The Witness: Fred W. Bodinson, B-o-d-i-n-s-o-n.

Direct Examination

By Mr. Lyon:

Q. What is your present occupation, Mr. Bodinson?

A. I am head of my manufacturing company, building steel machinery.

(Testimony of Fred W. Bodinson.)

Q. What is the name of the company, sir?

A. Bodinson Manufacturing Company.

Q. How long has Bodinson Manufacturing Company been in existence? A. It dates back——

Q. To the best of your recollection.

A. It is my recollection my dad started it when I was about six or seven years old, and I am 42 now.

Q. When was your first employment by the Bodinson Manufacturing Company?

A. Well, that started about 1928 or 1929, when I was a freshman in high school, working Saturdays and on vacations.

Q. How old were you at that time, sir? [519]

A. About 17, 16 or 17.

Q. You worked Saturdays and vacations at this company from then on until you got out of high school? A. Correct.

Q. So that you have been with the company continuously since 1928 or 1929?

A. That's right.

Q. When did you take over the presidency?

A. 1940.

Q. What is the policy of your company with respect to the maintenance of drawings of various equipment which you have built?

A. Well, we are very particular about keeping an accurate record.

Q. Would you describe the system to me, please?

A. Well, when a drawing is made, before we get a job, it is given an E number, that's an estimate.

(Testimony of Fred W. Bodinson.)

After the job is processed through the shop, then it takes a L, M, S, or K number. Once a drawing is made under those names, it is then put into the index file in three ways. One by customer's name, second by the subject matter, whether it should be a conveyor, a crane, or whatever it might be, and, thirdly, it is classified as to size.

Q. Has that same system been utilized since you began your association with this company? [520]

A. Yes.

Q. For every material or structure your organization has made since you have been there, they have had a drawing, is that right?

A. To the best of my knowledge, yes.

Q. Are those drawings—

A. I will go one step further, if I might add, every year we have a policy of putting all the drawings for that previous year on microfilm in order to put them in safe keeping should we have a fire or loss of any kind. Drawings are all put on microfilm and stored in a safety deposit box in a bank.

Q. I show you now a drawing marked for identification as Defendants' Exhibit A and ask if you can identify that drawing.

A. This was a drawing made in our company, December 4, 1931, by Mr. Pete Hansen, his initials are P. H., and his signature I recognize.

Q. You are referring to the lower right-hand corner in which there is a small box?

A. That's right.

(Testimony of Fred W. Bodinson.)

Q. I see it says, "Drawn by," and the initials P. H. are there. What would that indicate to your records?

A. That is P. H., Pete Hansen is the name.

Q. Would that be the draftsman? [521]

A. That is the draftsman who drew the drawings.

Mr. Sellers: Your Honor, I object to that. He didn't say he saw him do that. There has been no basis for saying he knew he drew it.

The Court: Aren't these documents admissible under the document rule? I think I read it to you the other day. All in the world you have to establish is that you keep a written memorandum, it is customary to keep a written memorandum in your files, and it speaks for itself. He has testified that they keep the drawings. He doesn't have to testify he knows them. He doesn't have to testify he knows anything about the drawing.

Mr. Sellers: He testified the company has kept them. He said he started to work when he was 16 or 17, but had nothing to do with them at that time and he was in no position to know the policy of the company at that time.

The Court: He doesn't have to show the policy of the company.

Mr. Sellers: Well, your Honor, he is president now and he can state what the policy has been since he has been president, but how can he state the policy prior to that time in the absence of a showing that he knew it?

(Testimony of Fred W. Bodinson.)

The Court: Were those found in the files of your company?

The Witness: Yes, sir. [522]

The Court: Is it customary to keep such records as those?

The Witness: Yes, your Honor.

The Court: I don't know what more you have to establish.

Mr. Sellers: Who found them there?

The Court: It doesn't make any difference.

1732 says that any writing or record, any writing or record, whether in the form of entries in a book or otherwise, made as a memorandum or record of any transaction, act, occurrence or event, and this certainly is a memorandum or record, a drawing, shall be admissible in evidence first, if made in the regular course of business, and this man testifies that it is the regular course of business to keep the records.

Mr. Sellers: He is not able to state it was made in the regular course of business. He says it is customary to keep them, but I repeat there is a considerable difference between a policy of keeping records and establishing it was made in the regular course of business.

The Court: If you have an objection, it is overruled.

Mr. Sellers: I do object.

The Court: Overruled.

Mr. Sellers: I think we are entitled to know who made it.

(Testimony of Fred W. Bodinson.)

The Court: The record speaks for itself. The witness says he recognizes the signature upon the record. [523]

Mr. Sellers: No. There is no signature there, your Honor.

The Court: The initials.

Mr. Sellers: You mean he recognizes a printed P. H.? I don't think you want to say you recognize that P. H.—well, I don't want to take over. I am sorry.

The Court: Can you tell me you recognize those initials?

The Witness: I do.

Mr. Sellers: As having been made by a particular man?

The Witness: I do.

Mr. Sellers: You know that is his P. H. as distinguished from a P. H. made by any other engineer?

The Witness: I mean I am as familiar as I can be with his signature. I can show you others written in longhand characters, different ones. There are two different ways. You just know them, that's all.

Mr. Lyon: It is the same as a bank clerk would know.

Mr. Sellers: These are two letters in printed form as in drafting.

The Court: If you have an objection, it is overruled.

Mr. Sellers: I do object.

The Court: Overruled.

(Testimony of Fred W. Bodinson.)

Q. (By Mr. Lyon): Is it the custom of your company when you have a drawing of this type to have it checked by an engineer after it has been drawn by the draftsman?

A. That is the policy, but it doesn't always happen, I [524] am sorry to say.

Mr. Sellers: I object to that question and move the answer be stricken. This drawing was made back at a time many years ago and the policy today is not relevant.

The Court: It may go out.

Q. (By Mr. Lyon): Do you follow the same filing system, the same system of keeping records, that was followed in the company before you?

A. Yes.

Mr. Sellers: I object. There is no evidence showing he knows that.

The Court: Suppose we have a company a hundred years old. There is nobody in existence that can testify they saw the records made, but they testify, "We have always kept records, and this was found among our records"?

Mr. Sellers: Then it might come in as an ancient document, but this is no ancient document. If he is going to testify as to policy, he should testify to a policy that he knows about, not something which he only has as a guess.

The Court: Objection overruled.

Q. (By Mr. Lyon): Of your own personal knowledge, do you know what that drawing represents?

(Testimony of Fred W. Bodinson.)

A. That represents a weigh hopper for the Bode Gravel plant at 16th and Alabama in San Francisco.

Mr. Sellers: I object, your Honor. There has been no [525] showing that he was present when the drawing was made. There has been no showing he knows it was made to scale, there has been no showing he knows it was accurate. He is looking at a drawing in order to do this. It is a matter of opinion. I move the answer be stricken.

The Court: Denied. The objection is overruled.

Q. (By Mr. Lyon): Did you see a drawing of this Alabama plant while it was in the course of being constructed? A. I did.

Q. Did you go over the drawing with other personnel who were engaged in constructing the plant?

A. I was too young, but I was working on the project.

Q. And you did see the drawing?

A. I did see the drawing.

Q. Although your position with the company wasn't such that you would advise anybody?

A. That's right.

Mr. Lyon: I would like to offer this in evidence, your Honor.

Mr. Sellers: I object, your Honor.

The Court: It may be received in evidence.

Mr. Sellers: No proper foundation.

The Court: Exhibit A in evidence.

The Clerk: Exhibit A. [526]

(Testimony of Fred W. Bodinson.)

(The document referred to was received in evidence and marked as Defendants' Exhibit A.)

Mr. Lyon: Your Honor, I have another group of drawings. Do you want them introduced as one exhibit or individually?

The Court: It doesn't make any difference to me.

Mr. Lyon: Perhaps it will be easier on the clerk if we do them individually.

Q. I will show you a second drawing and ask if you found this in your files.

A. That is the same drawing, I believe.

Q. I am sorry.

A. That is a copy I brought down.

Mr. Sellers: I would also like to make an objection to the other drawing, your Honor, upon the basis that it is secondary evidence. It is not the original drawing but instead is a print. There is a stipulation in this case that copies can be entered subject to verification. We have not had the opportunity to verify the original drawing.

The Court: Objection overruled.

Q. (By Mr. Lyon): I show you now a second drawing and ask you if you can identify that drawing as one you found in your files. A. Yes.

Q. To what does this pertain, according to the records of your company? [527]

A. This pertains to the same job, Bode Gravel, under Kaiser Paving, same register number, same group.

(Testimony of Fred W. Bodinson.)

Q. This is also a drawing of an element of that plant at Alabama Street in San Francisco?

A. Yes.

Mr. Sellers: Objected to as calling for a conclusion. The drawing speaks for itself.

The Court: That's perfectly all right. If you have no objection, it can be admitted in evidence.

Mr. Sellers: I do object.

The Court: Then they have to lay a foundation.

Mr. Sellers: Your Honor, he was asked an opinion, does it show a certain thing.

Mr. Lyon: I asked according to the records of his company.

Mr. Sellers: What records? I think we are entitled to know what records you are referring to.

The Court: Objection overruled. You may proceed.

Q. (By Mr. Lyon): What does this drawing represent?

A. This represents the slide gates on the cement weigh hopper.

Mr. Sellers: I object to the question and move the answer be stricken. The document is the best evidence of what it discloses.

The Court: The document may be the best evidence, but I [528] can't read the document.

Mr. Sellers: The document speaks for itself.

The Court: But I can't read the document.

Mr. Sellers: Then he should call in an expert.

The Court: Haven't we got an expert?

(Testimony of Fred W. Bodinson.)

Mr. Sellers: Not so qualified. I don't know whether he can read blueprints.

The Court: What is your educational background? That is the way to establish it.

The Witness: I have a State registration as an engineer here.

The Court: Are you registered by the State of California?

The Witness: Yes.

The Court: Can you read blueprints?

The Witness: Yes.

Mr. Sellers: That is a self-serving statement, your Honor. I don't think that is any way to establish the fact that he can read blueprints.

The Court: What is your educational background?

The Witness: I studied in high school drawing and in junior college drawing. I spent many years in my own company drawing. I quite often do the drawings for the equipment we build today.

The Court: How long have you been making drawings of [529] your own?

The Witness: For the company since 1934 off and on.

The Court: How many drawings have you made?

The Witness: Oh, I haven't occasion to make too many of them. Most of them are sketches. Some complete drawings I put in the shop myself, but offhand I would say a couple of hundred.

The Court: In your work, is it necessary to read these drawings?

(Testimony of Fred W. Bodinson.)

The Witness: Absolutely.

The Court: How long have you been reading drawings?

The Witness: I have been reading drawings since 1929.

Mr. Sellers: But, your Honor, he may have been reading them wrong. He hasn't established the basis that he is qualified to read them at all, and the fact that he has been reading them wrong does not establish that he is an expert.

The Court: You know, some lawyers come up in court and sometimes they don't agree with the judge, and maybe they think the judge is reading the wrong cases.

Mr. Sellers: Your Honor, I move to strike that.

The Court: I think this man is qualified.

Mr. Sellers: On what basis, your Honor? He has said he can read drawings. That is a self-serving statement. He says he makes most of his sketches. When he wants a drawing made, he turns it over to the draftsman. He says he has read a [530] couple of hundred drawings or more. No one who has ever seen him read a drawing has said he could.

The Court: If you want to, you can bring an engineer up here and he can read them and give the interpretation.

Mr. Sellers: That is what should be done.

Mr. Lyon: He is an engineer.

Mr. Sellers: But that shows something relating to a particular plant. An engineer wouldn't be able to tell that.

(Testimony of Fred W. Bodinson.)

The Court: I think he was asked what does it relate to, and he said it relates to a particular plant.

Mr. Sellers: It's the same thing. Your Honor, he is not an expert. He may be, but he hasn't shown it.

The Court: I think he has as much of a background as your first witness did.

Mr. Sellers: My first witness has testified and now is no time to attack him.

The Court: Your first witness didn't have a formal education. His whole testimony was based upon the experience which he had in the field.

Mr. Sellers: He had two years in college, your Honor, and he had been—well, you know what he said as well as I. But in this case——

The Court: Suppose you proceed, Mr. Lyon.

Q. (By Mr. Lyon): Are you a registered engineer in the State of California? [531]

A. I am.

Q. You have passed the qualifications test that that requires?

A. At the time I took the test, yes.

Q. In mechanical engineering? A. Yes.

Q. What does mechanical engineering involve? The reading of blueprints?

A. And designing.

Q. Designing and reading of blueprints and that type of thing?

A. Yes. This one I have right here is an old one. It is 1951.

Mr. Sellers: Did you have it renewed?

(Testimony of Fred W. Bodinson.)

The Witness: Yes, I had it renewed. I haven't got it with me, but every year it is renewed automatically.

Mr. Sellers: I have to pay \$6.00 for mine.

Q. (By Mr. Lyon): Mr. Bodinson, in your duties as an officer of the corporation, as president of the corporation, do you have cause to read various blueprints concerning various construction jobs you are doing?

A. Every day.

Q. Do you advise your personnel what to do on the basis of your having read these blueprints?

A. I do. [532]

Q. How to construct your equipment, how to construct the plants?

A. I do.

Q. I will ask you again, what does this drawing relate to?

A. That relates to a slide gate, air operated.

Q. That would be a slide gate for what?

A. It is for the Bode Gravel plant job at 16th and Alabama.

Q. Is that the slide gate for the aggregate hopper or cement hopper?

A. That is for the cement hopper.

Mr. Lyon: May I have this identified as defendants' exhibit next in order?

The Court: It may be marked.

The Clerk: F for identification.

(The document referred to was marked Defendants' Exhibit F for identification.)

Mr. Lyon: I offer it in evidence.

(Testimony of Fred W. Bodinson.)

Mr. Sellers: I object, your Honor, upon the ground it is not properly identified.

The Court: Overruled. It may be admitted in evidence.

The Clerk: Exhibit F.

(The document referred to was received in evidence and marked as Defendants' Exhibit F.) [533]

Mr. Sellers: I would like to add there is no showing of authenticity. We don't know who made it, we don't know the source, where it was made, by whom or who saw it made.

The Court: Overruled.

Q. (By Mr. Lyon): I show you a second drawing and ask you to identify that, sir.

A. That is made by Mr. Pete Hansen, December 11, 1931, for the same job we are speaking of, made in San Francisco at our plant.

Q. And that illustrates what?

A. That is a bottom plate to a bin.

Mr. Sellers: I would like the record to show that the witness read this from the blueprint and didn't state that of his own knowledge.

The Court: The record may so show.

Mr. Sellers: Thank you.

Mr. Lyon: That would be one of the bottoms for one of the storage bins?

Mr. Sellers: I object to the question. It is leading.

The Court: Sustained.

(Testimony of Fred W. Bodinson.)

Q. (By Mr. Lyon): What does that show?

A. This is the bottom of one of the storage bins on the main hopper above, above the weigh hopper.

Q. Would that illustrate the device used in the plant constructed at Alabama Street in San Francisco? [534]

Mr. Sellers: I object to that question as leading.

The Court: Overruled.

The Witness: Yes.

The Court: It may be marked.

Mr. Lyon: May this be marked Defendants' Exhibit G and may I offer that in evidence?

Mr. Sellers: Object upon the same basis as the preceding objection.

The Court: Same ruling. It may be admitted in evidence.

The Clerk: Exhibit G.

(The document referred to was received in evidence and marked as Defendants' Exhibit G.)

Q. (By Mr. Lyon): I show you another drawing and ask you to identify that, sir.

A. This drawing is made by a man who is now deceased. You can't read it, but I can. Mr. B. P. Little. I may phrase that a little different. You can see the signature. It is difficult. But it is the long-hand of Mr. B. P. Little. It is on the Bode Gravel plant in San Francisco, and it concerns the cement weigh hopper and the rotary feeder above it.

Mr. Sellers: I would like the record to show that

(Testimony of Fred W. Bodinson.)

the identification was read from print in this case, also.

The Court: The record may so show.

Mr. Lyon: This shows the cement weigh hopper and the feed—— [535]

Mr. Sellers: I object to the question, your Honor, as leading.

Mr. Lyon: He just so stated, your Honor.

The Court: The witness can probably read the drawings much better than the attorney can.

Mr. Lyon: I think that is correct.

Q. What does that show, that drawing?

A. It shows the arrangement of the rotary feeder above the weigh hopper and the linkage of the weigh hopper to the scale lever parts.

Q. It shows the support of the—which hopper?

A. The cement hopper.

Q. The cement hopper. From the scale?

A. From the scale levers.

Q. Was that installed in the Alabama plant in San Francisco?

Mr. Sellers: I object, your Honor, as leading.

The Witness: Yes, it was.

Mr. Sellers: I move to strike it.

The Court: Overruled. The answer may stand.

Mr. Lyon: I would like to have this marked Defendants' Exhibit next in order and offer it in evidence.

The Court: It may be marked.

Mr. Sellers: Same objection, your Honor.

(Testimony of Fred W. Bodinson.)

The Court: Same ruling. It may be received in evidence. [536]

The Clerk: Exhibit H.

(The exhibit referred to was received in evidence and marked as Defendants' Exhibit H.)

Q. (By Mr. Lyon): I show you a further drawing and ask you if you can identify that.

A. That is a general arrangement of the weigh hopper showing the cement hopper, the aggregate hopper, and that is the scale there.

Q. Scale for what?

A. This is the scale for the cement, the one that is in the center, independently hung. That is the leverage.

Q. Does it show anything else?

A. There is a scale lever there.

Q. Scale levers. What are those for?

A. That is for the cement scale hopper. That is the cement hopper, weigh hopper.

Q. Which was in the——

A. In the center of the——

Q. Aggregate hopper?

A. Aggregate hopper.

Q. Was it independently movable in there?

A. Definitely.

Q. This is a drawing made by your company?

A. Yes.

Q. Found in your files? [537]

A. That is correct.

Q. Pertaining to the construction of the Ala-

(Testimony of Fred W. Bodinson.)

bama plant? A. Correct.

Mr. Lyon: May this be marked next in order?

The Court: It may be marked.

Mr. Lyon: Offer the same in evidence?

Mr. Sellers: I object, your Honor.

The Court: Same objection and same ruling.

Mr. Lyon: Thank you.

The Clerk: Exhibit I.

(The document referred to was received in evidence and marked as Defendants' Exhibit I.)

Q. (By Mr. Lyon): I offer you another drawing and ask if you can identify this drawing.

A. That was made in our company by Mr. B. P. Little, the man I mentioned before, for the Bode Gravel plant, 16th and Alabama, and it shows the feeder drive for operating the cement feeder, and it shows scale beams. I believe that is for the cement.

Mr. Sellers: I ask the record to show, your Honor, that the identification as to the Bodinson Manufacturing Company and where it came from was read from the print.

The Court: The record may so show.

Q. (By Mr. Lyon): This drawing was found in your files? A. That is correct. [538]

Q. It pertains to the construction of the Alabama plant? A. That is correct.

Mr. Lyon: I would like to have this marked next in order.

(Testimony of Fred W. Bodinson.)

The Court: It may be marked.

Mr. Lyon: I offer it in evidence.

Mr. Sellers: Same objection, your Honor, for the same reasons.

The Court: Same objection and same ruling. It may be admitted.

The Clerk: Exhibit J.

(The document referred to was received in evidence and marked as Defendants' Exhibit J.)

Q. (By Mr. Lyon): I now show you a further document and ask if you can identify that.

A. This is a copy of the shop order. After we get a job at Bodinson Manufacturing Company, that tells who took the order, which happened to be my father, and it was sold to Kaiser Paving Company for the Bode Gravel Company, 16th and Alabama Streets in San Francisco. It details, spells out in detail, every bolt, nut, drawing number, bearing, hopper, general description of everything that goes into the construction of that particular order. [539]

The Court: Where did you get that?

The Witness: That I took out of our private files of my company.

Q. (By Mr. Lyon): It has been the practice of your company to keep a record of this type on all jobs?

A. That is correct.

Q. Every time you get a job, you make out such a purchase order?

A. Every job.

Q. And those records are kept how?

(Testimony of Fred W. Bodinson.)

A. Well, we keep them in this—this goes back to August 3, 1931, and generally there is a big file of drawings, or material with each order in a job of this size. We keep all those things, delivery receipts, invoices, buy-outs, foundry weigh slips, things of that nature, correspondence. We keep all of that in our files. Finally, about two or three years ago, we had to reduce our files because of space, so we went back beyond, well, from up to around 1932, November, 1932, and beyond that we threw out all those foundry slips and invoices, but we kept a copy of the general order file, and that is what this represents. So we have a complete story of everything we built all the way back, but we do not have the invoice for a valve, or something like that. But we do keep the order itself.

Q. That has been the custom of your company, to keep [540] records of this kind, since your association? A. Yes.

Q. To the best of your recollection?

A. Correct.

Q. When you took over as president, you didn't change the system? A. Not a bit.

Q. You continued the system?

A. We always refer back to these.

Q. You continued using the same system which you inherited from the former president?

A. That is correct.

Mr. Sellers: Now, I object to that question and I move the answer be stricken. He can't tell what the system was before he took over.

(Testimony of Fred W. Bodinson.)

The Court: It may go out. He said he didn't change the system.

Mr. Lyon: I am sorry. What went out? Could we have that read back?

(The record was read.)

The Court: He can't testify to what the system was before he took over. His testimony was he continued the same old system. I think that is as far as he can go.

Mr. Lyon: I agree with you, your Honor.

Q. According to your records, your method of keeping [541] records, what would this document indicate?

A. This particular document indicates that there is the drive machinery for 24-inch by 178-foot conveyor, and all the component parts, the air ram gates under the main holding hopper, aggregate hopper, and all the parts, component parts to that, the weigh hopper and all the component parts to that, including the cement weigh hopper and the water-holding hopper, a water tank on it, and all the component parts, such as the air cylinders, the pistons, the bolts, nuts and glands—well, that just about covers everything.

The Court: What is the date? Are there any dates on that?

The Witness: The date on that is August 3, 1931.

Q. (By Mr. Lyon): That would be the date that this order was sent down to the department that was to handle it?

A. To process it in the shop, yes.

(Testimony of Fred W. Bodinson.)

Q. How is it processed in the shop?

A. We make these things up in several duplications. In other words, one of those goes to the engineering department, one goes to the purchasing department, and one goes into the steel shop, and one goes into the machine shop, and one goes into the delivery room, the receiving clerk, and the purchasing agent in our company will go down over the list and he will see parts we have to buy out, maybe a cut steel pinion, if we weren't cutting pinions at that time, which we weren't [542] and still don't, buy some special rubber washers, or things of that nature.

The next man might come along and buy some castings, brass, bronze, for the cylinders. Rubber gaskets would be purchased outside. We don't make the rubber gaskets.

Then the steel shop would go down and check these things from the drawings and description here and proceed to order the steel to fabricate the things called for, and continue to incorporate all these component parts.

The receiving clerk, it would be his duty to receive these things that are bought on the outside, and mark them when they come in according to the marks on these drawings. For instance, this cylinder tube would be item R on sheet No. 4 of register No. 11198. That would go into a bin until such time as they were ready to use that, and then they would go to the bin and take that part out and put it on that particular unit.

(Testimony of Fred W. Bodinson.)

The shipping clerk uses the same document to check off everything when it is ready to ship.

Then all that is put back into the file after the job is shipped and probably goes to the cost department to see whether we made money or lost money. That's the end of it.

Q. Now, the parts that were ordered by this purchase order went into what construction?

Mr. Sellers: I object. There has been no basis to show [543] he is in any position to know where these parts went. He has identified this particular thing according to the policy of his company.

The Court: Well, the record speaks for itself.

Q. (By Mr. Lyon): According to the document.

The Court: The objection is sustained. What does the document show?

Mr. Lyon: It shows——

The Witness: It was shipped to the Bode Gravel Company, 16th and Alabama Streets, San Francisco.

The Court: The document speaks for itself.

Mr. Lyon: May I offer this group of job orders?

The Court: That may be marked for identification.

Mr. Lyon: I offer the same in evidence.

Mr. Sellers: I would like to object, your Honor. This is a copy. It is not the original.

The Court: You don't have to have originals under this rule.

Mr. Sellers: I am just objecting, your Honor. I think this is a good objection. There has been no basis laid to show that the speaker has any knowl-

(Testimony of Fred W. Bodinson.)

edge of what went in there, how they got together, how they relate to any issue related to this particular action. The only connection between this particular bit of evidence in this case is the fact that he got it from the company files, and on the letterhead happens [544] to be a name indicating some relationship to some of the bits of evidence here.

The Court: The objection is overruled. It may be admitted in evidence.

The Clerk: Exhibit K.

(The document referred to was received in evidence and marked as Defendants' Exhibit K.)

Q. (By Mr. Lyon): I show you a second job order and ask you if you can identify that.

A. This is to be delivered to the same plant, Bode Gravel, at 16th and Alabama, sold to the Kaiser Paving Company account. The order was taken by Mr. King, who was our chief engineer at that time, and Mr. Bjorn.

It calls for a cement weigh hopper for drawing L-2488, and the component parts of it, cylinder, slide gates, air cylinders, as stated before, and calls for the additional component parts that might be required.

Mr. Sellers: I move the answer be stricken, your Honor. The document speaks for itself. I also want the record to show that what he has read he read from the document.

(Testimony of Fred W. Bodinson.)

The Court: Objection sustained. The document speaks for itself.

Mr. Lyon: There is one other question.

Q. I note here on the first page of this job order the number L-2488, which is after one weigh hopper for cement complete [545] as per drawing L-2488. Could you explain what that means, according to the records of your company?

A. According to the record, when the man in the shop gets the order, he says that is what has to be built, and he gets hold of the engineering department and asks for blueprints or drawings and proceeds from there.

Q. According to the records of your company, would Exhibit A in evidence be the drawing referred to?

A. Yes. That would be it, and that portion of this drawing would be that cement hopper.

Q. In other words, the number L-2488 corresponds to the number on this drawing.

A. On this drawing, and the cement hopper corresponds to this particular section. That is what it is.

Mr. Lyon: May I offer this next group of job orders?

The Witness: That is how it is made.

Mr. Sellers: Same objection as to all the other documents, not properly authenticated.

The Court: Objection overruled. It may be received in evidence.

The Clerk: Exhibit L.

(Testimony of Fred W. Bodinson.)

(The document referred to was received in evidence and marked as Defendants' Exhibit L.)

Q. (By Mr. Lyon): May I show you another document and [546] ask you if you can identify that.

A. That is for the same account, Bode Gravel Company, 16th and Alabama. The order was taken by Mr. King, Jones and Little, all of our engineering department. This was December 17, 1931, and reads, "Change main scale beams on both cement and aggregate hoppers."

Mr. Sellers: I move the answer be stricken, your Honor. He is reading from the document and it speaks for itself.

The Court: I think the objection is good. The document speaks for itself. You can lay a foundation for the document being found in the files of the company.

Mr. Lyon: That's all I wanted.

The Court: And the document can be introduced in evidence.

Q. (By Mr. Lyon): This is a document found in the files of your company?

A. That is correct.

Q. I hand you the next in this group and ask you if you can identify that.

Mr. Lyon: May I mark this as the next in order, your Honor?

The Court: It may be marked.

(Testimony of Fred W. Bodinson.)

Mr. Lyon: And I offer it in evidence.

Mr. Sellers: Same objection.

The Court: Same objection and the same ruling. [547]

The Clerk: Exhibit M.

(The exhibit referred to was received in evidence and marked as Defendants' Exhibit M.)

The Witness: This is another copy of order taken by Mr. King and Mr. Bjorn——

Q. (By Mr. Lyon): Don't read the document. Just identify it as found in your files.

A. It is the same one found in the files of the same company.

Q. This is a purchase order, a job order which was found in your records?

A. That is correct.

Q. Pertaining to this particular construction?

A. Yes.

Mr. Lyon: May I ask that this be marked next in order?

The Court: It may be marked.

Mr. Lyon: And I offer the same in evidence.

Mr. Sellers: Same objection.

The Court: Same objection. It may be received in evidence.

The Clerk: Exhibit N.

(The exhibit referred to was received in evidence and marked as Defendants' Exhibit N.)

The Witness: This is another similar document,

(Testimony of Fred W. Bodinson.)

job order, found in our files for the same [548] purpose.

Q. (By Mr. Lyon): For the same job?

A. For the same job.

Mr. Lyon: May I ask that this be marked next in order and I offer the same in evidence.

Mr. Sellers: Same objection.

The Court: Same objection and same ruling. It may be received in evidence.

The Clerk: Exhibit O.

(The document referred to was received in evidence and marked as Defendants' Exhibit O.)

Q. (By Mr. Lyon): Would you thumb through this sheaf and see if you can identify that group?

A. These documents are all orders for the Bode Gravel plant, 16th and Alabama, found in our files.

Q. Thank you. A. Shop orders.

Q. Of the same nature as the last documents we had? A. That is correct.

Mr. Lyon: May I ask that these be clipped together and identified as our next exhibit?

The Court: They may be marked as the next exhibit.

Mr. Lyon: And I offer the same in evidence.

Mr. Sellers: Same objection.

The Court: They may be received in evidence. Same ruling.

The Clerk: Exhibit P. [549]

(Testimony of Fred W. Bodinson.)

(The document referred to was received in evidence and marked as Defendants' Exhibit P.)

Q. (By Mr. Lyon): Mr. Bodinson, when did you first see the plant at Alabama Street, in San Francisco, to the best of your recollection? Did you see it under construction? I will ask that question first.

A. Yes, I did. I would say it was one of the Saturdays in the fall of 1931, between August and December.

Q. How do you set that date, sir?

A. Well, at that time that was the only time I could perform work for the company, on Saturdays. I was in school the rest of the time. It was my habit and work that I went to the shop with my father on Saturdays and worked in the shop and went about the different jobs. This happened to be one right in town in San Francisco. We were a few miles from the job, and it was natural that I would go over to the job, because a lot of work was done on Saturdays in those days.

Q. Did you do any work on this plant while it was being constructed?

A. I would limit it to maybe the helpers classification, painting, or something of that nature. Not any construction.

Q. But you had an opportunity to observe the construction of this plant as it went up?

A. Well, most of it was built when I wasn't

(Testimony of Fred W. Bodinson.)

there, so [550] to speak, but I saw it on occasion, on Saturdays, and from then on I would make deliveries to it, maybe, later on in the years following.

Q. What type of a lot was this plant put up on? I mean was it just an open lot?

A. 16th and Alabama Street in San Francisco is right near the railroad, the switch tracks. It is an open lot, and this particular building was open all around at the base and had a stairway from the ground floor up to the batch floor, and from there on it was covered with galvanized sheeting for a short distance, and then it went into wood structures which housed all the sand and gravel in the bins to make the weigh floor.

The Court: Mr. Lyon, may I call your attention to the fact that you said you would take only a few minutes? We are approaching 3:30.

Mr. Lyon: I hope to be finished at 3:30.

The Court: Mr. Sellers should have some right to cross-examine, or the witness will have to come back.

Mr. Lyon: I will be through in five minutes.

The Court: Five minutes? You were only going to take four or five minutes to begin with.

Mr. Lyon: There was some difficulty in getting the drawings identified.

The Court: I cannot go after 4:00 o'clock. If Mr. [551] Sellers doesn't complete, the witness will have to come back.

Mr. Lyon: I will finish in two questions.

The Court: All right.

(Testimony of Fred W. Bodinson.)

Q. (By Mr. Lyon): Was this plant open to the public view for any one that happened to be around? I mean walking down the sidewalk, you could see the plant? A. Yes.

Q. Nothing secret about the operation?

A. Nothing secret about it.

The Court: What difference does it make? The plant was in operation.

Q. (By Mr. Lyon): Did this plant comprise, to your knowledge, an aggregate hopper having a cement hopper disposed therein suspended from separate scales?

Mr. Sellers: I object, your Honor.

The Court: Sustained. Here is just a boy working around the plant.

Mr. Lyon: Yes, sir.

The Court: He was only there a short period of time.

Mr. Lyon: That's right, but I believe his testimony will show that he has been associated with this plant for many, many years after that, your Honor.

The Court: You have got the drawings in evidence. What more do want?

Mr. Lyon: Nothing. I turn the witness over to Mr. [552] Sellers.

The Court: All right.

(Testimony of Fred W. Bodinson.)

Cross-Examination

By Mr. Sellers:

Q. When you were a boy, 16 or 17, and going around with your father, at that time you didn't have an engineering education? A. No.

Q. And at that time you didn't have the opportunity to compare the construction of the Alabama plant with the drawings used in making it, did you?

A. I believe I testified to that.

Q. You didn't have an engineering education?

A. I said that I did not compare them.

Q. I am sorry. I thought you said you did.

A. I said I had nothing to do with the drawings at that time.

Q. At any later date did you have occasion to take the drawings of the Alabama plant and compare it piece by piece with the Alabama plant itself?

Mr. Lyon: I will object to that, your Honor. I don't see the purpose.

The Court: Overruled.

The Witness: I have referred to the drawings many times [553] since.

Mr. Sellers: I would like my question answered, please.

The Witness: Ask it again, please.

The Court: Read the question.

(Question read.)

The Witness: No, sir.

Q. (By Mr. Sellers): Then, as a matter of fact,

(Testimony of Fred W. Bodinson.)

at the time it was built you don't know and didn't know that the plant was the equal or equivalent of the drawings which we have seen here and which have been introduced in evidence, and at no time since then have you compared these drawings with the Alabama plant to make certain that they identify that in detail?

A. Well, I have been down to the plant many, many times.

Mr. Sellers: I move the answer be stricken, your Honor, as not responsive. I would like to have my question answered.

The Court: It may go out.

The Witness: I am trying to get what you are driving at. Will you read the question again, please?

(Question read.)

The Witness: No.

Q. (By Mr. Sellers): Thank you. When did you start studying engineering? [554]

A. In 1932, September.

Q. When did you graduate as an engineer?

A. I did not graduate as an engineer.

Q. How many years engineering did you take?

A. I had two years junior college, preliminary engineering work.

Q. Where was that?

A. Marin Junior College.

Q. Marin Junior College?

A. That is correct.

(Testimony of Fred W. Bodinson.)

Q. Did you specialize in any particular type of engineering?

A. No. I was just building up the preliminaries.

Q. While you were a boy 16 or 17, you worked with your father at the plant on Saturdays and week ends. When did you become a full-time employee?

A. I believe it was full time in 1934.

Q. In 1934?

A. Yes, in the summer or fall of 1934.

Q. What was your capacity at that time?

A. Well, you might call it sort of co-ordinator in the shop, getting orders and jobs tied together, and later on went out on jobs directing steel work and putting jobs together as an erecting man, I would say, in 1935.

Q. When did you become an officer of the company? [555]

A. June, '40; July, '40.

Q. And prior to that time you had no part in formation of policy of the company, did you?

A. No, that is correct.

Q. So that what the policy of the company was with respect to the keeping of records of the handling of orders was entirely something outside of your field of activity back in the years 1931, 1932 or 1933, in that period?

A. That is correct.

Q. And, therefore, when you told us what the policy of the company was with respect to the records, you were telling us what it is since you have been in an official capacity with the company?

A. Which is no change prior to that.

(Testimony of Fred W. Bodinson.)

Mr. Sellers: I move to strike that as not responsive to my question.

The Court: It may go out.

Mr. Sellers: I would like an answer.

The Court: Read the question.

(Question read.)

The Witness: That is correct.

The Court: I might say I am not interested at all relative to the material that went into this plant. I am interested only as to the date.

Mr. Sellers: Only as to the date, your [556] Honor?

The Court: Only as to the date. That is the only thing I think is material. There is no question the plant was built. The question is whether it was built in 1931 or at a later date than 1932. The invoices show the date when the materials were delivered. We have the testimony of these other witnesses as to when it was built. I am satisfied that if you want to you could find in San Francisco from the Building Department when the building permit was issued. You can also probably find from the electric company when the first service was given.

Mr. Sellers: Your Honor, the fact that a plant may have been built at a particular date is no assurance that the particular plant here was built at that time.

The Court: You can also investigate and see whether or not there was more than one plant at that particular location.

(Testimony of Fred W. Bodinson.)

Mr. Sellers: Your Honor, we can do these things, but they are not in this record here. The fact that we can do it is no——

The Court: I have intimated I would give you time to make an investigation.

Mr. Sellers: Yes, your Honor, and we may have to take advantage of it.

The Court: I have indicated I would give you a reasonable time.

Mr. Sellers: Your Honor mentioned something about [557] Thursday or Friday of next week, and I will be out of town.

The Court: I want to get rid of this witness if I can, so let's proceed.

Mr. Sellers: I know you do.

The Court: Inasmuch as I have broken into your line of thought, I want to say this to you, that when I said a moment ago to you about assessing the costs, it included attorneys' fees. I don't want you to get any idea that I am making a difference between attorneys' fees and costs.

Mr. Sellers: I never thought so, your Honor.

The Court: I want costs to include attorneys' fees.

Mr. Sellers: I would like to clear up one thing for our own information, your Honor.

The Court: All right.

Q. (By Mr. Sellers): With respect to Defendants' Exhibit K, on sheet No. 4, we find reference made to one 6-ton weigh hopper with cement compartment and 120 gallon water tank integral per

(Testimony of Fred W. Bodinson.)

drawing L-2348 and consisting of: Can you tell us where that drawing L-2348 is?

A. It should be in our files. When I picked up these things last night I ran through a whole stack of files to get as many drawings as I could out, and whether I overlooked it or couldn't find it or it wasn't in the same group, I don't know, but I am strongly convinced we have a film of it, a micro-film of it. [558]

Q. You don't know where the drawing is?

A. At this moment, I don't. I suspect it is in the files where it should be, but I didn't check all the drawings and all the tag numbers.

Mr. Sellers: That's all, your Honor.

Mr. Lyon: No further questions.

The Court: May this witness be excused?

Mr. Lyon: Yes, he may.

The Court: You may be excused.

(Witness excused.)

Mr. Lyon: We have no further witnesses after we are through with this man.

The Court: You may proceed with your cross-examination of the other witness.

Mr. Sellers: Thank you.

E. F. CORNETT

a witness called by and on behalf of the defendants, having been heretofore duly sworn, was examined and testified further as follows:

Cross-Examination

(Continued)

By Mr. Sellers:

Q. Mr. Cornett, you will remember that in connection with Plaintiff's Exhibit 20, I asked you when the cement fell [559] from the center hopper G and from the aggregate hopper Y, where they fell to, where they came together, and I made a mark, rather, I drew a line from the letter X to a point in the collector hopper L and asked you if that was the point and you said yes, is that correct?

A. That is correct.

Q. You have also testified, however, that when the cement and the aggregate fell from the hoppers, they struck, came together three-quarters of the way down the chute, is that not correct? A. Yes.

Q. The point X that I marked is at the top of the chute and not three-quarters of the way down. Which is accurate?

A. Three-quarters of the way down.

Q. Let me finish, please. Which is accurate, the top of the chute or three-quarters of the way down?

A. Three-quarters.

Q. Then they don't come together at the top of the chute, do they? A. No.

Q. That is wrong? A. That is wrong.

Q. All right. Now, let's put a mark here where

(Testimony of E. F. Cornett.)

you think they would come together on this [560] chute? A. There is a mark right there.

Q. Right here.

A. There is a mark on there already.

Q. I will put a big circle there and we will run a letter out to an M for that. Now, that is where you say they now come together, right there?

A. That's right.

Q. Is that three-quarters of the way down the chute? That is in the upper one-quarter.

A. It is about three-quarters of the way down the chute.

Q. In other words, where the M goes through, that is three-quarters of the way down the chute?

A. That's right.

Mr. Sellers: I ask your Honor to take notice of the fact that the point M, which the witness now states is where the cement and the aggregate come together, is near the top of the chute, the top of the chute being here, and not three-quarters of the way down, as the witness states, and the witness formerly stated they came together at X, and he now states they come together at M, and he has previously testified they come together three-quarters of the way down. X and M are neither of them three-quarters of the way down.

The Witness: That would be three-quarters of the way down the chute. [561]

Q. (By Mr. Sellers): What kind of a chute do you have in this Alabama plant as actually built?

A. A V-type chute.

(Testimony of E. F. Cornett.)

Q. What is a V-type chute?

A. Broad at the top where the aggregate entered, and it tapered down to go into the mixer.

Q. And how long was it?

A. It was approximately 6 foot, 6, 7 foot long.

Q. Was it circular at the top?

A. Right at the top, it circled up so that there would be no spillage.

Q. And about what diameter was it?

A. At the top it was about three and a half feet.

Q. Three and a half feet in diameter?

A. Yes.

Q. How far down below the bottom of the aggregate hopper was it?

A. Approximately two feet.

Q. Two feet below, and how wide was the aggregate hopper above the collector?

A. That I don't remember any more.

Q. How does it happen you can remember the dimensions of the collector and you can't remember the dimensions of the——

A. I didn't give you any particular dimensions on the collector. [562]

Q. I am sorry. Didn't you just say that this is about—what did you say the dimension of the top of that collector was? A. About four feet.

Q. Now, I would like to ask you, what is the dimension, if you know, of the bottom of the gate?

A. I have forgotten.

Q. You have forgotten. Didn't you say that in your work you worked around this plant and that

(Testimony of E. F. Cornett.)

you had occasion to repair all parts of it over a period of 14 years? A. That's right.

Q. Well, how many times did you look at that gate?

A. Dozens and dozens of times, but it has been so long ago I just don't remember the dimensions.

Q. In 14 years you looked at that gate every day or six days a week, and you can't tell us what the dimension of the bottom of the gate was?

A. No, I don't remember.

Q. Can you tell us whether it was round or square? A. A flat sliding gate.

Q. All right. The opening which the gate closed, was that round or square?

A. It was flat and square.

Q. Well, was it——

A. It ws square. [563]

Q. You don't remember how big it was on the side?

A. No, I don't remember the dimensions. It has been too long ago now.

Q. All right. The cement outlet up above that, what was the dimension of the cement outlet?

A. It was 12 by 18.

Q. How does it happen you can remember the cement outlet which is—— A. Well, it was.

Q. Pardon me. I haven't finished—which is positioned only about a foot from the aggregate outlet and you can't remember the aggregate outlet? I would like to have you explain that.

(Testimony of E. F. Cornett.)

A. I have reason to remember that because we repaired that more often.

Q. But you had to go through the aggregate outlet to get to the cement outlet, didn't you?

A. Yes.

Q. So actually you were bumping your head on the aggregate outlet more than you were on the cement outlet, weren't you?

A. Yes, but I still don't remember the aggregate dimensions. If I remembered them, I would state it, but I don't remember them offhand.

Q. What was the size of the cement valve that closed [564] the cement hopper?

Mr. Lyon: Your Honor, may I question the materiality of this, what the dimensions have to do with this?

The Court: I don't know. I think he has a right to cross-examine. He may be trying to show he doesn't have a very good memory. I don't know. Go ahead.

Q. (By Mr. Sellers): What is the size of the cement valve at the bottom of the cement hopper?

A. 18 by 12.

Q. What was the height above the ground of the bottom of the cement hopper?

A. From the aggregate hopper to the cement hopper?

Q. I beg your pardon. From the aggregate hopper to the ground, how far was it?

A. Clear to the runway?

Q. Clear to the ground.

(Testimony of E. F. Cornett.)

A. That would be clear down to the runway. About 35 feet.

Q. 35 feet. The length of that chute you have stated was how long?

A. Approximately $7\frac{1}{2}$ or 8 feet.

Q. $7\frac{1}{2}$ or 8 feet. If you took a section of it, was it round in section or was it triangular?

A. Round.

Q. Round in section. [565] A. Yes.

Q. Its central axis was vertical? It didn't slope off as we have shown in this drawing, is that correct? A. Yes.

Q. In other words, instead of this hopper going down, as I will now mark in dotted lines, it didn't do that?

A. It went straight down from the aggregate gate. This is not drawn very clearly. It went straight down the aggregate gate so that——

Q. In other words, it didn't slope over to the side as here? A. No.

Q. Did you put any water or was there any water put into the aggregate and cement as it came out of the hoppers?

A. As it come out of the hopper, yes.

Q. Where did you put the water in?

A. There was a valve you threw over here in the scale hopper——

Q. No, no, let's refer to this drawing.

A. ——and there is where your water hopper is, see. You threw the valve here and there was a pipe coming from this water tank and it circled down

(Testimony of E. F. Cornett.)

underneath the hopper and went right down in this loading hopper, back hopper here, and went right into the mixer.

Q. In other words, you simply dumped a stream of [566] water into the hopper L down at the bottom, just a single stream of water?

A. That's right.

Q. You didn't try to encircle the aggregate stream with the water? A. No.

Q. Just dumped it right in?

A. No. The water went into the mixer proper.

Q. Into the mixer proper. I see. Mr. Murasko said you and he had worked together six years, I believe. However, you said that he and you had worked together for nine years. Now, I would like to have you tell me whether you worked with Mr. Murasko for six years or nine years. Do you remember?

A. I worked with him from 1930 to 1942.

Q. 12 years.

A. He left the plant in 1942. I had worked with him in 1930, and we had been apart, as I stated, when there was a depression on, and I was not there for a time, and then I came back.

Q. Well, I would like to know just how long you worked together.

A. He was there all that time.

Q. I know, but I would like to know how long you worked at that plant under Mr. Murasko. Was it six, nine or twelve years? [567]

A. As a superintendent, six.

(Testimony of E. F. Cornett.)

Q. As superintendent, six.

A. That's right.

Q. Did you work there in any other capacity?

A. Did I work there in any other capacity?

Q. Yes. A. No. Just as an operator.

Q. So really you worked under him for six years? A. Yes, sir.

Q. Not 12?

A. No. We worked a total together with the company of 12.

Q. Didn't you say you took a trip in 1936?

A. That's right.

Q. Isn't it a fact that you and Mr. Murasko started working together in the very year you took a trip? A. No.

Mr. Lyon: Your Honor, we have been over this ground before. I object to the question. It is repetitive.

The Court: Well, I won't restrict the cross-examination until 4:00 o'clock. At 4:00 o'clock I will restrict it in toto.

Mr. Sellers: Will you read the question?

(Question read.)

Q. (By Mr. Sellers): Were you working with Mr. Murasko [568] before or after you took that trip?

A. Probably working with him at the time.

Q. Working with him at the time. All right. How long had you been working with him at that time?

A. '30 to '36.

(Testimony of E. F. Cornett.)

Q. In other words, six years, and then you left there in 1942? A. No. I left there in 1947.

Q. And he left in 1942?

A. That is correct.

Q. So really you were working with him for 12 years? A. Yes.

Q. How did we get nine years? Where did that come from? A. I don't know.

Q. Nine years doesn't mean a thing to you?

A. Not a thing.

Q. You don't remember saying before you worked with him for nine years? A. No.

Q. We have a gate on the cement hopper, do we not? A. Yes.

Q. How is it operated? A. By an air ram.

Q. And where was that air ram [569] positioned?

A. At the side of the hopper here.

Q. Would you understand, then, that the ram to operate the gate on the cement valve actually extended right out through the aggregate hopper?

A. Yes, sir.

Q. And didn't the aggregate and all that fall on the ram?

A. No. There was a baffle over it.

Q. A baffle over it? A. Yes.

Q. And it protected it from the aggregate?

A. That is correct.

Q. So that the valve—how did you operate that? How did you protect it?

A. There was a baffle plate through here. Mr.

(Testimony of E. F. Cornett.)

Murasko didn't add that when he drew this picture here. There was a baffle plate coming down over it and the air ram worked under the baffle plate on to the cement gate.

Q. Would you like to draw that in in red on that—if I may, Mr. Lyon? Is that all right?

A. You would have to erase a hole through there.

Q. You just put in the dotted lines in red so we know about where that goes.

A. A big ram here, I mean a shaft, and your air ram would be out here. [570]

Q. Where was this protecting baffle?

A. Here.

Q. That is over the top of it?

A. That is correct.

Q. Do I understand that the ram moves with the weigh hopper, or how are you going to weigh that weigh hopper if you have got this ram connected outside there? The gate is rigidly connected to the ram, isn't it?

A. It is floating.

Q. What do you mean by that?

A. It floats in the air there.

Q. What pulls the gate out if this is floating in the air?

A. Air.

Q. Air pulls it out?

A. That is correct.

Q. Well, you have to have a leverage here for something to get hold of so when you pull here the gate will come open, don't you?

A. It is mounted on this baffle plate up here on a bracket to secure the air ram itself.

Q. The ram is mounted on this bracket?

(Testimony of E. F. Cornett.)

A. Yes, on the bracket.

Q. But the bracket is carried by the aggregate hopper, is it not? [571] A. Yes.

Q. So then do we find that the ram is mounted by the—is connected to the aggregate hopper?

A. Yes.

Q. Well, now, if the cement hopper is supposed to move only with the aggregate hopper, wouldn't the fact that it is connected through the connection between the ram and the baffle, would that not adversely affect the accuracy of the weighing of the cement hopper?

A. No, because it is mounted on flexible springs.

Q. You mean those springs didn't exert any force? A. No.

Q. What did you have them there for?

A. To get away from anything that would hold the cement hopper up.

Q. It didn't exert any force? Springs usually exert force. Why didn't you omit them?

A. Because they were on there for that purpose, to give this free play.

Q. Well, do I understand that your gate upon your cement hopper is connected through its own ram through a bracket to the aggregate hopper, which would seem to mean, if I understand what you say, that the two do not have completely independent movement.

A. The ram stood still. Only the gate [572] moved.

Q. All right. The ram stood still, so when you

(Testimony of E. F. Cornett.)

wanted to weigh the cement in the cement hopper with the ram standing still, how can you weigh it accurately? A. Your scales are set that way.

Q. In the discharge of your aggregate hopper, does the aggregate hopper fall down all the way around in a circle? A. Yes, sir.

Q. Don't you have a baffle here, a protecting baffle or bracket?

A. Yes. It is pitched like this where it goes over the top of that.

Q. Where it goes over the top doesn't it tend to produce an open area here on the side?

A. No, because it falls over the top and comes back together again.

Q. Well, wait. You have seen it do that?

A. Oh, yes.

Q. Is it a fact that the inner walls of your aggregate hopper extend down substantially to the gate valve, is that correct?

A. Not all the way down.

Q. Not all the way down. Do they extend as shown here? A. Practically.

Q. When did you observe that these inner walls of the [573] aggregate hopper do not extend into the plane of the valve?

A. You can see that each time you worked on it. I had to clean it up.

Q. You are sure that if the drawings showed that inner wall extending down the plane of the valve, that they would be in error?

(Testimony of E. F. Cornett.)

A. I didn't see the blueprint. I don't know. But I know they didn't go clear down.

Q. You do know that a drawing showing this plant construction with that baffle going down to the slide plate valve is in error because you saw this for 14 years and you know that doesn't go that far down?

A. I would say that is correct. I didn't see the blueprint. If the blueprint shows it, it is not right.

Q. And to the extent that that is wrong, the blueprints are wrong or any showing that shows it that way is wrong?

A. That is approximately right the way it stands right there.

Q. And about what is this distance here below the end of the inner baffle and the gate?

A. Oh, about eight or ten inches.

Q. Eight or ten inches. That is the way you remember it?

A. That's right. [574]

Q. You were with this company 14 years at this plant, Mr. Cornett. Were there any changes that took place in this construction during the time you were there?

A. What do you mean?

Q. Well, I will limit my question to the relationship of the aggregate and cement hoppers.

A. No.

Q. They were that way when you first went there?

A. As originally designed; yes.

Mr. Sellers: I move that answer be stricken. It is a conclusion of this witness. He doesn't know how it was originally designed. He only knows how he first saw it.

(Testimony of E. F. Cornett.)

The Court: It may go out.

Mr. Sellers: Please read the question.

(Question read.)

The Witness: Yes, sir.

Q. (By Mr. Sellers): And it remained that way without change during the whole time you were there?

A. That's right.

Mr. Sellers: That's all, your Honor.

Mr. Lyon: No further questions, your Honor.

The Court: All right. You may step down.

(Witness excused.)

Mr. Lyon: The defense rests, your Honor. [575]

Mr. Sellers: We are tired, too, your Honor. We rest.

The Court: I have been looking at my calendar. How much more time do you anticipate it is going to take to complete the case?

Mr. Sellers: We are going to spend a few days to try to check upon this new and surprising evidence.

The Court: I am going to give you time

Mr. Sellers: I know you are, your Honor, but what additional time will be taken will be dependent upon what we discover, but I will be surprised if we will require all of another day. We may not require more than half a day.

The Court: How about March 30th? That is two weeks from today. Don't tell me you are going to take depositions on March 30th.

Mr. Sellers: Your Honor, I am taking one in New York on the 26th and I will be back here on the 27th.

The Court: I thought you said the 22nd and 23rd.

Mr. Sellers: Those are in Philadelphia, your Honor. I will be leaving here on the 21st and I will be in Philadelphia until that week end and then in New York.

The Court: If it goes over beyond the 29th, I am starting a big antitrust case in April, and the only thing I can do in April is give you a Monday afternoon.

Mr. Sellers: That would be all right.

Mr. Lyons: That is perfectly all right with me as long [576] as Judge Harrison doesn't want me. I am starting a case there on the 17th of April.

The Court: How about April 23rd? That will give you nearly a month. That will give you time to investigate.

Mr. Sellers: I don't have my calendar, but as far as I know, that is all right.

The Court: I will continue this case until April 23rd at 2:00 o'clock in the afternoon. If you don't have too much testimony, I will hear your arguments.

We will now recess until tomorrow [577] morning.

Monday, April 23, 1956—2:00 P.M.

The Clerk: No. 17,121-HW Civil, C. S. Johnson Company vs. Merle Stromberg, et al.

Mr. Lyon: Ready, your Honor.

Mr. Sellers: Ready.

The Court: On this Stromberg matter, I continued it until this afternoon in order to give the plaintiff an opportunity to make an investigation in San Francisco to determine whether or not the plant as described at the trial had been established when the witnesses said it was established and whether it did the things the witnesses said it did. I am perfectly willing to hear you at this time.

Mr. Sellers: May it please the court, the plant dates back to 1931, your Honor will remember, it is so alleged, and it is the testimony of one of the defendant's witnesses that the plant was disintegrating in 1947 and the plant was scrapped. We were unable to find that was not a correct statement. As of this time there is no plant so far as we can ascertain that can be checked to see what was in it.

The Court: Well, I am satisfied, as I said before, there is some evidence in the Water Department or in the Power & Light Department as to when service first was given in this plant.

Mr. Sellers: If I may say so, your Honor, that would [580] only establish that there was a plant there.

The Court: That's right.

Mr. Sellers: We are not particularly concerned with whether or not there was a plant there, but whether or not there was a plant there which anticipated the patent here in suit, and whatever might be in the Water Department or in the way of issued licenses would not establish that point.

The Court: What are we going to do with the testimony of these witnesses?

Mr. Sellers: Well, your Honor, I am going to throw it out, if I can.

The Court: All right.

Mr. Sellers: In other words, there has been testimony given here, which was not noticed properly, and your Honor has tried to do equity in that connection by giving us additional time, for which we thank you.

On the other hand, it was a fact that at the time of the trial we didn't have the opportunity to study the drawings that were produced and to examine these witnesses with that preparation. The witnesses are no longer here, and we are not asking that they be returned at this time, but we believe that under the governing rules of law this alleged prior use is not properly before this court, and that which is before the court does not carry conviction.

It is our understanding that in addition to pursuing [581] any additional evidence this afternoon, we would also have our final arguments. Am I right in that, your Honor?

The Court: I will be glad to listen to you.

Mr. Sellers: I think, then, that is where we should go from here.

Mr. Lyon: Do you have any objection to my introducing this?

Mr. Sellers: I will object to its being introduced if you offer it, certainly.

Mr. Lyon: Two matters, your Honor. First, you will recall during the time Mr. Bodinson was on the

stand, he identified a series of drawings of this plant, one of which was missing, and there was a request by counsel to produce it, and I have this drawing.

Mr. Sellers: I don't believe that shows in the record, Mr. Lyon. I believe that was off the record, and whether it was mentioned or not, no proper foundation has been laid, its relevancy is not shown, and we object to it.

Mr. Lyon: I merely produced it for your convenience. I do have a copy, your Honor, of the Bureau of Buildings Inspection for the City and County of San Francisco for the Alabama Street plant in question dated June 24, 1931. I would like to offer this in evidence on this basis. The copy I have is not certified. I believe it is a public document and you could take judicial notice of it, but may I put it in evidence [582] subject to my replacing it with a certified copy?

Mr. Sellers: I object to it upon the ground no proper foundation has been laid, it has not been properly authenticated, and certified, and there is no relevancy shown.

The Court: I will have to sustain the objection upon the ground that you haven't got it certified. I don't think I can take judicial knowledge of a filing in San Francisco, can I?

Mr. Lyon: Your Honor, I am not an authority on that. My only question was may I introduce this and have it ignored if I don't substitute a certified copy?

The Court: You can have it marked for identification, if you wish.

Mr. Sellers: I object to it in evidence, your Honor.

The Court: I don't think you can object to having it marked for identification.

Mr. Sellers: I don't see that it is relevant, your Honor. Well, I can't object, I don't think, either.

The Court: It may be marked for identification only.

The Clerk: Defendant's Exhibit Q for identification.

(The document referred to was marked Defendant's Exhibit Q for identification.)

Mr. Sellers: Except I could object on the ground that the defendant has rested.

Mr. Lyon: We have a stipulation that you and my predecessor in interest entered into which may well cover this. [583]

Mr. Sellers: I am referring to the entrance of this, certified or uncertified. If I have stipulated——

Mr. Lyon: Your objection does not go to the question of certification, then?

Mr. Sellers: If it is relevant and admissible, I will abide by my stipulation. I do believe the record shows uncertified copies can be admitted subject to verification. I do recall that.

The Court: We will have it marked for identification only, and it will stay here.

Mr. Sellers: I am sorry, Mr. Lyon. I didn't have that in mind.

The Court: I think the record is sufficient without that, Mr. Lyon.

Mr. Lyon: Well, your Honor expressed some interest in it and I wanted to offer it.

The Court: I know that for the purpose of indicating to the plaintiff I thought the plaintiff could get certain information relative to when this plant was established and when service was first given to it, that's all.

Mr. Sellers: Thank you, your Honor.

The Court: All right, now. You may proceed.

Mr. Sellers: Before I start proceeding, your Honor, might I ask how much time we have?

The Court: How much time do you want? [584]

Mr. Sellers: I conceive that very well we will need, depending upon the number of questions your Honor asks, and I invite those, but we are going to need an hour probably for the purpose of opening and rebuttal.

The Court: I will give each side 45 minutes.

Mr. Sellers: That will hardly do, your Honor.

The Court: I give only 30 minutes when they have to talk to a jury. You don't win lawsuits by argument, but by evidence.

Mr. Sellers: Your Honor, if we don't win this lawsuit here, we may not win it at all.

The Court: That's right.

Mr. Sellers: May it please your Honor, this is an infringement action, your Honor will recall. The action was brought by the C. S. Johnson Company, a corporation, manufacturing batching plants and batching equipment.

The defendant is an individual doing business under the name of California Batching Equipment Company, Mr. Stromberg.

It was alleged that he infringed certain things claimed in Johnson patent No. 2,138,172.

Your Honor will recall that there was some little confusion about the fact that we didn't point out the patent had expired, and I want your Honor to know in looking over my notes for an opening statement, the second line said that the [585] patent had expired, so I would have told you, your Honor, had I had the opportunity to make an opening statement. The patent did expire. On the other hand, I repeat that there would not have been one iota of change in our side of the case had that not been the case.

The patent was issued to the C. S. Johnson Company and it contained certain claims of which we allege claims 1 to 5 were infringed.

Our first witness was a man named Mr. Wright, your Honor will recall. He was a man with a very considerable background in the field of concrete and batching equipment, an inspector for the City of Los Angeles, very fine background. I believe his testimony carried conviction.

Mr. Wright applied claim 1 of the patent in suit to the Exhibit 16, I believe it was, of the plaintiff's exhibits, and clearly showed that the claim read upon the Stanton construction. It was also applied to the Johnson construction.

Exhibits 14 and 16 were used in that connection, and your Honor will recall that the two plants were

shown there side by side. The witness read and was given the individual parts of the claims and he applied those individual parts to the construction of those two plants.

I don't believe, your Honor, there is any reason to doubt but that claim 1 of the patent in suit does read upon both the patented construction and upon the construction made [586] by the defendant here, known as the Stanton plant.

Furthermore, I believe the record will show Mr. Stromberg's own testimony was to the effect that the provisions of claim 1 would read upon all of his plants having a central cement hopper which is independently movable.

Claim 5 was then referred to and that claim was applied by the witness Wright to the Johnson and Stanton plants.

Your Honor will recall that claim 5 of the patent reads:

“* * * and instrumentalities to supply water to the flowing shaft of aggregates in a tubular stream surrounding said aggregates and flowing into same at an angle thereto.”

It was shown that that particular claim read upon both the patented construction and also upon the Stanton plant construction.

Mr. Stromberg also testified that the showing of Exhibit 14 illustrated the construction of the Stanton plant and was typical of all of his plants having a central hopper and independent weighing means.

although he also stated at a different time that only the Stanton plant had the water, I do believe.

So I think there is just no question but what claims 1 and 5 read upon the alleged infringing constructions as illustrated by those exhibits, which exhibits were properly set [587] forth and identified as being accurate and made by a man who examined the plants and made them to scale, and made them accurately.

I think infringement was established. Now, if infringement was established, *prima facie* infringement, there remains a question of whether or not there was invention present and whether or not there was novelty.

Now, relative to the question of novelty, the patent art cited by the defendant here to anticipate simply fails to anticipate. That prior art doesn't teach a central cement hopper situated within the aggregate hopper. It fails to teach cement and aggregate hoppers having their own weighing means, and it fails to teach a cement hopper discharging centrally through the discharge of the aggregate hopper, and I use those various elements in combination.

The testimony of the witnesses Wright, Pearman and the defendant Stromberg was in agreement that a hopper in this field includes a body and an inlet and an outlet.

None of the witnesses had ever seen a hopper which did not discharge in its lowest point, and they testified in order to be operated the discharge had to be at its lowest point or all of the cement

wouldn't fall out. That obviously applies to the aggregate hopper, too.

The prior art which apparently was relied upon by the defendant included Robb, 1,750,244 and the patent to Johnson, [588] 1,687,499.

The Robb patent is deficient as an anticipatory patent in that it fails to teach a hopper within a hopper, and instead it has side-by-side arrangements, and there is no discharge of cement through the discharge of aggregate as is inherent where the cement hopper is within the aggregate hopper.

We have the improved construction result, your Honor, that our cement is discharged through the flow of aggregate, and that simply is not true in Robb. There was no independent cement hopper within the aggregate hoppers at all and, furthermore, there was in Robb no spray around the aggregate shaft encircling the cement shaft as called for by claim 5.

As to the Johnson patent, which would seem to be the next patent of greatest interest to the defendant, there is no hopper within a hopper. There is no cement bin within the center of the discharging aggregate. There are no independently movable hoppers. There is no central feeding of cement into the shaft of aggregate. There is no discharge of cement through the discharge outlet of the aggregate, and there are no scales. In other words, your Honor, it is crystal clear that the two references which we sense the defendant relies upon most definitely fail completely to anticipate.

None of that art teaches the patented construc-

tion which renders it possible to obtain the advantages which our construction obtains: [589]

1, that the cement must discharge through the aggregate outlet, and

2, that the aggregate will fall through the aggregate outlet first and so precede the cement and thereby prevent the cement striking metal parts and the cement striking water in the mix truck and balling up. That was very definitely important. Our Mr. Wright so testified, and the witness Pinne so testified.

Now, relative to the presence of invention in our patented construction, it has been suggested that no invention would be required to make that construction and that individual weigh hoppers were old and that no invention would be required to bring spaced hoppers together.

Well, if bringing those hoppers together would obtain our result, that wouldn't be a bad argument, but the simple fact is that you could bring them together, but you wouldn't get our result unless you provided a single discharge outlet for your aggregate and discharge your cement through the discharge of the aggregate, and that is nowhere suggested except in the patent in suit.

Certain advantages of our construction comprise pre-mixing at the time of discharge to effect a reduction in the mixing time necessary to mix.

Your Honor will recall there was some discussion about how important that was. The fact is where these trucks [590] are coming into these plants one

after the other, the cutting down of a few seconds in loading time becomes important.

Furthermore, it is an advantage to have the insurance that the product will be satisfactory, and that it just won't be right part of the time.

The protection of the cement by the enclosing wall of aggregate, which characterizes our construction and which does not characterize the construction of any of the prior art, singly or combined, is this. We have less air pollution in an area such as this, and certainly anything which will give us less air pollution in this area here is important.

It prevents the "hanging up" of the cement in the discharge passages, and it prevents the balling up of the cement in the mixer. Your Honor will recall those terms. It was brought out that under certain conditions where the cement came from the side, the moisture from the aggregate would cause the cement to gum up, to hang up in the batching unit, and also where it falls down into the mixer first, into the mixing truck, it would ball up if it hits the water.

Our construction prevents improper discharge through having the aggregate below the cement so that the aggregate must fall out first, and also it has the advantage, by making the construction we do, you get a lower plant height, and a lower plant height obviously can result in decreased costs.

There is a new element present in the combination of [591] our patent in that we provide a single discharge upon opposite sides of the central cement

hopper. There is no teaching in the prior art of an arrangement of those various hoppers as we have them. There is no teaching in the prior art of our improved result.

I respectfully point out to you that if I had more time I could go in and cite the law on the fact that if you have a new arrangement and a new result, you have all the elements of a patented object.

I would like now to touch just briefly upon the testimony of the witnesses. I have referred to Mr. Wright and the fact that he applied the claims 1 and 5 to the patented construction and to the construction of the Stanton plant. The fact of infringement was clearly established.

Mr. Wright, whose testimony is entitled to weight, testified he to his personal knowledge could operate a Johnson type plant under wind conditions which would make it necessary to shut down other types of plants, and he testified that in his opinion the Johnson type plant was superior. He testified concerning the pre-mixture of the cement and aggregate as the two were discharged from the hopper, and that that would provide a superior mix, that it would eliminate difficulty in the mixing truck and would even reduce the danger of balling up.

There was just no question but what Mr. Wright believed that the patented construction was superior for the [592] reasons mentioned.

He also testified, as I have said, that a hopper is essentially a body having an inlet and an outlet.

The witness Buckler was provided who was brought in to establish commercial success. We

could have brought many other witnesses for that purpose in addition, but there is just no question but what the particular construction of this patent has been really commercially successful.

Mr. Buckler testified since about 1951 about 60 per cent of all plants sold in the area in which he sells, that is the 11 western states, 60 per cent of all plants sold had been Johnson type plants. There is little doubt, I believe, that the evidence shows that the Johnson type plant has been a commercial success.

Your Honor will recall that Mr. Pearman was called as a witness and he testified his Gardena plant and his Stanton plant, he was the owner of both, were substantially the same except that the Stanton plant was bigger and better, and that they functioned the same otherwise.

There was also evidence brought out later that only the Stanton plant had the water, but except for that Mr. Pearman stated they were the same. I don't believe he made that distinction.

Mr. Stromberg was brought in, you will remember, the defendant here, and he testified that he obtained the [593] concept of the arrangement of the plant and that the Gardena plant was the first plant, that he obtained that arrangement concept from Mr. Pearman himself. That didn't ring a logical bell to this speaker. It seemed reasonable Mr. Stromberg must have known more about plants than Mr. Pearman and, as a matter of fact, your Honor will remember later on the witness stand Douglas Pinne testified that he, as one of the execu-

tives in charge of distribution for Consolidated Rock Company, the biggest company of its kind in the West, took over the operation, and Mr. Stromberg worked for him. That at the time he took over that operation, there were a number of plants, two of which were of the Johnson type, and at that time Mr. Stromberg had charge of the repair of all those plants, and it seems quite evident that Mr. Stromberg either didn't remember that at the time he built the Gardena plant he knew about the Johnson plants from having worked on them at Consolidated Rock, or that he intentionally misrepresented the knowledge.

It seems more likely that Mr. Stromberg, a builder of plants and a man who worked on those plants, would have gained that knowledge from his contact with the plants, having worked on them, rather than from Mr. Pearman who, according to his own testimony, had never built or never owned a plant prior to that time.

Mr. Stromberg was rather loath to admit, your Honor will recall, that there was any mixing action in the discharge [594] of the aggregate and cement hoppers together. The analogy of the ball rolling off the roof was pointed out to Mr. Stromberg, and how could it be prevented that the aggregate coming from the sloping sides would not describe an arc into the path of the cement so that certain intermingling and mixing would result, and Mr. Stromberg wasn't able to answer that question.

As a matter of fact, the defendant's own witness, Mr. Wisniski, later in the trial admitted that there

would be intermingling. He didn't like the word mixing, which in his opinion had a particular meaning, apparently it was a word of art for him, but that there would be an intermingling of the aggregate and of the cement was admitted by Mr. Wisniski.

Now, on behalf of the plaintiff, Douglas Pinne was brought in. He was superintendent of distribution for Consolidated Rock Products Company which, as I have said, is one of the largest concrete mixing plants in the world. He had some 23 plants, including plants of the Johnson type, and under his jurisdiction there were mixing plants, and he was qualified as an expert as a man of practical experience dating back to 1925. I think it rather clear to your Honor that his testimony was entitled to substantial weight.

He testified that with the side feed of the cement going into the collecting hopper the cement is at times prevented from going down by the flow of aggregate, and that the cement tends to come back in the reverse direction, in the [595] direction from which it came, and to fly out in all directions from the collector hopper, resulting in air pollution and, obviously, in inaccuracy of mixing.

He also stated that when the relationship was as in the Johnson plant, there was less dust and less air pollution, and accomplish more accurate mixing.

Mr. Pinne also stated there was a moisture problem present in the side feed type of plant which is eliminated in the Johnson plant. By that he meant that the aggregate contains moisture and when the

aggregate feeds down by the cement opening there, the moisture from the cement which has been stored there, will adversely affect the cement and will result in a gumming up relationship.

He also pointed out that balling up is eliminated entirely in the Johnson type plant.

He also pointed out that where the mix is dry and batched into a dump truck, the relationship of the side feed is undesirable in that the cement tends to go to one side of the dump truck and the aggregate goes to the other. That is a dry type of plant.

Mr. Pinne was definitely of the opinion that the central feed type, which characterizes the Johnson plant, is superior to anything on the market.

I would say that upon listening to Mr. Pinne, one couldn't hear that testimony without coming to the conclusion [596] that the Johnson type plant, in his opinion, which agreed with Mr. Wright's, was superior.

Then we have the witness Mr. Wisniski for the defendant. Mr. Wisniski was a bachelor of science with a degree in chemistry, primarily a chemist, and he testified that in his opinion getting the water in there in the right proportion was the most important thing. He contended there would be no mixing of the cement and the aggregate, but upon going into the matter we found that he didn't mean to say by that there would be no intermingling. In fact, he admitted that in a Johnson type plant in the discharge operation there would be intermingling of the cement and the aggregate which,

your Honor will recall, is not taught anywhere in the prior art.

Now, your Honor, we come to the defendant's witness Murasko, who testified in connection with the plant in San Francisco. He testified that in 1931 he was employed and at that time he said that the Bode Company constructed a plant on Alabama Street in San Francisco, and he went on to define what he thought that was.

Your Honor will recall that there was a complete absence of any documentary proof or evidence to support what Mr. Murasko stated, and that his recollection was entirely, so far as anything he brought in was concerned, based on what he remembered, unless, your Honor, he had his recollection refreshed by other drawings. [597]

Your Honor, my co-counsel will, after I have completed, like to discuss the question of the weight and the availability of Mr. Murasko's testimony and its anticipatory effect where it is completely oral, some 25 years after the event, unsupported by documentary evidence. Your Honor, such testimony is to be examined extremely closely, particularly where the corroboration is extremely sketchy.

The Court: What are you going to do with the plans? Are you going to disregard the plans entirely?

Mr. Sellers: Those plans, your Honor, do not belong in this case, as I will try to show you. They have been admitted by virtue of what is known as the business record rule, and I think before I have completed my argument, either I will convince you

that they are not properly competent evidence in this case, or you will believe that I don't understand the rule, one way or the other, because for my money those records were business records, we will admit, but your Honor was under the misimpression that all that was necessary to get those into the evidence was to show that they were business records. The rule just doesn't read that way, and I will discuss that point in a minute, your Honor.

Mr. Murasko testified working under him was Mr. Cornett.

Mr. Murasko didn't say anything about any plant that had a water discharge meeting the terminology of claim 5, your [598] Honor, and if you accept everything Mr. Murasko said as true, claim 5 still stands unanticipated.

Mr. Cornett testified, and it will be remembered he said he worked for the Bode people from about 1933 to 1947. He wasn't quite sure of his dates, he couldn't tie them in with any public record, unless it was the fact that he visited his uncle in Vancouver, British Columbia, and his uncle was mayor. Other than that, he couldn't remember anything. He took trips, but there was nothing to substantiate the dates he alleged.

His testimony was not very helpful. He was able to remember the dimensions of the hopper, your Honor will remember, but he couldn't remember the dimensions of the discharge gate. Here was a man that, according to his testimony, had to crawl through that gate to work on the cement gate. It

was suggested that he bumped his head on the discharge opening or gate, rather than on the cement, and yet he couldn't tell how big it was. He wouldn't even hazard a guess.

Your Honor, it will be suggested that possibly he got his information from seeing the drawings at a later date.

Now we come to the matter of Mr. Bodinson, president of Bodinson Manufacturing Company, San Francisco, and the ozalid prints which were brought in by Mr. Bodinson. What was Mr. Bodinson's testimony? He stated that he had been president of the Bodinson Manufacturing Company, San Francisco, [599] since the year 1940. He was first employed by the company in 1928 or 1929, when he was 16 or 17 years of age. That originally he used to work on Saturdays with his father, and that at the time he said the Alabama Street plant was being constructed, he went there with his father, your Honor will recall, and did some painting. He didn't do the construction work. He didn't have any contact with the drawings nor with the engineer. He was unable to state of his own personal knowledge or to identify any of the drawings that were produced and to connect them with the construction of the plant.

He testified that he had not compared those drawings with the plant construction at that time, and on cross-examination he testified that he had not at any later time compared the plant drawings with the plant.

In other words, Mr. Bodinson was president of the company. He produced some drawings, but he failed, and there was no attempt for him to connect those drawings with that plant. He produced drawings from his company records.

He produced a large number of exhibits which he stated, in the wording of the defendant's counsel, related, according to the company policy, to the Alabama Street plant. He didn't say they related to that plant. He didn't know. He testified he never saw the drawings at that time. He testified he had never compared them later. He was in no position, by his own admission, to say that those drawings related to [600] that plant, but according to company policy, whatever that means, he testified he took the drawings from the files of the company, and he said that the files were maintained as a matter of company policy.

Now, your Honor admitted those drawings under the provisions of 28 U.S.C. 1732. Well, your Honor, I would like to point out to you that those drawings, in my opinion, were erroneously admitted, and having been erroneously admitted, the question now is what weight is to be given to them. If every company record were by virtue of the fact that it becomes a company record to be competent and relevant, what an easy way to obtain evidence and to bring in anything. You don't have to say, "It is my evidence. I produce it. I have had it." And testify where it has been all the years, but you merely say it came out of the company files and by virtue of that fact it goes in.

If that were all, and your Honor virtually said in the course of the hearing that all he had to do was say that they came out of the company file, but I don't think your Honor will agree to that after we have finished our discussion.

He was the only witness, you will remember, to support those records as a part of the evidence in this case.

Now, your Honor, 28 U.S.C. requires two things. It requires that the records be, and I quote, "made in the regular course of business," and, two, it requires it was the regular [601] course of such business to make such memorandum or record at the time of such act, transaction or event, and within a reasonable time thereafter."

Now, when the Alabama Street plant was built, your Honor, according to your own statement, according to the record I have, you said, "Here is just a boy working around the plant"—

The Court: May I ask you a question?

Mr. Sellers: Yes, certainly you may.

The Court: Suppose a manufacturing company is building a plant. The plant is built. They establish their records. They take the blueprints and put them away in their files. Aren't the blueprints part of the official records?

Mr. Sellers: It is good to establish some occurrence, some event, some act, but what act, what occurrence or what event, your Honor? We have gone from a——

The Court: As far as I am concerned, those are

the blueprints and the drawings of the building in question.

Mr. Sellers: Who said that, your Honor? There has been no evidence of that.

The Court: Do they have to produce the fellow that drew the plans and have him testify?

Mr. Sellers: Your Honor, there is no competent testimony relating those drawings to that plant. The mere fact that on their face they happen to bear the same name does not [602] indicate anything. Let me finish, your Honor. Those drawings are not identified with that plant in 1931. Your Honor, when they put a new product on the market, a company comes out with a new model, before a model is produced and sold, it may have ten different prototypes and designs. There is not one iota of evidence to say, "We carefully searched our drawings and these are the only drawings we ever found or we ever made and have in our files relating to this plant."

The Court: But those drawings, when added to the actual testimony of the witness——

Mr. Sellers: What witness?

The Court: The first witness.

Mr. Sellers: The first witness knew nothing about the drawings, your Honor.

The Court: He described the plant itself.

Mr. Sellers: He said he worked there.

The Court: He described the plant itself and told how it operated.

Mr. Sellers: Yes, your Honor, and whether or not his evidence is entitled to weight——

The Court: His testimony and the drawings, if you add them, they dovetail.

Mr. Sellers: But, your Honor, you have no right, I respectfully submit, you have no right to dovetail these drawings unless they are properly before the court. What your Honor [603] is doing here is saying, "Well, these aren't before me properly, but notwithstanding I see them, and therefore I will combine them with the others."

The Court: No. That is what you are doing. I say they are before me properly.

Mr. Sellers: Well, your Honor, I mean if my argument be sound that is what you are doing. I do agree that you have admitted them, but I respectfully contend the fact that they have been admitted neither establishes their relevancy nor their competency.

I would like to go on, your Honor. I repeat that under 1732 it is necessary to show that those drawings, and I quote, were "made in the regular course of business." Now, who was it that testified that those drawings were made in the regular course of business?

The Court: Well, when you build a plant, don't you have to have a drawing?

Mr. Sellers: Who established that fact? You don't have to presume it, your Honor. It has to be established. What right do you have to presume that they were made in the regular course of business? It is a prerequisite of 1732 that they be made in the regular course of business, and there is not one iota of evidence that such is the case.

Mr. Bodinson testified that he couldn't establish that, and your Honor said he was a boy back at that period. Now, [604] who says they were made in the regular course of business? I don't say it. Counsel is in no position to say it. Mr. Bodinson disqualifies himself. Who says it?

For my money, your Honor, one of the essential ingredients of the entrance under 1732 is missing. I pointed out to your Honor at the time, and the record so shows, that it is quite a different thing to establish a policy of keeping records and to establish a policy of making records at the particular time. No one, certainly not Mr. Bodinson here, was able to take himself back to 1940.

The Court: It seems to me that when a business is established and records are kept, that the plans and specifications of the building which is built are a part of the official records of the business. I don't know how you can get around that.

Mr. Sellers: What do you mean by official records of the business, your Honor? I don't know that the corporation had any——

The Court: All right, scratch out official. The records of the business.

Mr. Sellers: Well, obviously, your Honor, under this rule you said they were admissible, but I am pointing out to you that I don't question they are part of the records, and I don't question but what if the proof would meet these two tests, that they are properly admissible. What I say is, your [605] Honor, you have no right to assume one simply because the one is established, and the fact of the

matter is that neither one is established, and I will tell you why.

Mr. Bodinson's testimony is only as to the company policy as of this time. He was there in 1940, and what the company policy was back in 1931, we have no evidence concerning at all.

Now, I ask your Honor, what right do you have to presume because the testimony shows that the policy is one thing today, and Mr. Bodinson stated he hadn't changed it, whether or not there were three other presidents before Mr. Bodinson who may have changed it. I don't know and you don't know.

The fact of the matter is in order to get this in, we have to presume, and I respectfully contend, your Honor, its admission is error.

Mr. Bodinson became president in 1940. The time in question is 1931. Mr. Bodinson couldn't testify to the company policy nor practice in 1940. You stated that he was just a boy painting around the plant. Are you going to let that boy tell us what the company policy back then was? Are you going to let him tell us that it was the company policy back at that time to make these drawings in the regular course of business?

The Court: Let's take Sears, Roebuck, for instance. Everybody that had anything to do with the original Sears, Roebuck [606] is dead and can't testify.

Mr. Sellers: All right.

The Court: Don't you think somebody can come

in and say, "This is our policy and has been our policy over the years"?

Mr. Sellers: Why didn't someone come in and testify to that, your Honor? Why didn't they? You ask me, and so now I ask you. They didn't. I am not saying someone couldn't have reviewed the records of the company, could not have gone back and could not have developed that sort of proof, but I say they didn't. I don't say just because they don't prove their case it is up to you or to me to presume they could have if they tried. I say the record doesn't support that evidence. What they could have done is pure speculation. The point is they didn't.

The Court: I don't want to interrupt, but I have got a criminal matter that I have to take care of. You have been working my reporter pretty hard. You have been talking for 30 minutes.

Mr. Sellers: Your Honor, I think this is critical, and I think you can see how critical it is.

The Court: I will let you continue after recess. We will take our recess now until 25 minutes after 3:00.

Mr. Sellers: How much more time do I have?

The Court: I understood you wanted your partner to say something. [607]

Mr. Sellers: Yes.

The Court: If you use up all the time, he is not going to get a chance.

Mr. Sellers: I respectfully point out, your Honor, 45 minutes is hardly adequate.

The Court: We will stand in recess.

(Recess.)

The Court: You may proceed.

Mr. Denny: Your Honor, I would like to prove to the court that even if those drawings are in evidence, it doesn't make any difference to the outcome of this case. The law on what it takes to anticipate a patent by proving prior public use is fairly well established. The leading case is the Barbed Wire patent case, 143 U.S. 275. There the patent in issue related to the well-known barbed wire.

One of the defenses was anticipation by prior public use. The defendants put in about six alleged anticipations, and as to one of them they brought in 24 witnesses who swore that they had seen that.

The Supreme Court in sustaining the validity of the patent had this to say:

“We have now to deal with certain unpatented devices claimed to be complete anticipation of this patent, the existence and use of which are proven only by oral testimony. In view of the [608] unsatisfactory character of such testimony arising from the forgetfulness of witnesses and their liability to mistakes, their proneness to recollect things the party calling them would have them recollect, aside from the temptation to actual perjury, courts have not only imposed upon defendants the burden of proving such devices, but have required that the proof shall be clear, satisfactory and beyond a reasonable doubt.”

The Court: They use the words "beyond a reasonable doubt"?

Mr. Denny: "Beyond a reasonable doubt," your Honor.

The Court: What is the citation? I never heard that before.

Mr. Denny: 143 U.S. 275. Then again I am quoting:

"The doctrine was laid down by this court in *Coffin vs. Ogden*, 85 U.S. 18 Wall., 120, 124, that 'the burden of proof rests upon him,' the defendant, 'and every reasonable doubt should be resolved against him. If the thing were embryonic or inchoate; if it rested in speculation or experiment; if the process pursued for its development had failed to reach the point of consummation, it cannot avail to defeat a patent founded upon a discovery or invention which was completed, while in the other case there was only [609] progress, however near that progress may have approximated to the end in view.' "

Now, a more recent case I have found is from the District Court in the Northern District of California, decided in 1946, *Food Machinery Corporation vs. the Pacific Can Company, et al.*, 70 U.S.P.Q. 474. There the patent related to a can handling machine. The defendant relied on oral testimony of prior use and also on a figure in a prior patent drawing for anticipation. The court had this to say, and I quote:

"The defense of anticipation rests upon two points; first, that Fig. 5 of the Chapman patent

drawing reveals the principle and, second, that in 1923 Chapman actually incorporated this principle in one or more machines. The evidence on this second point is too confused and uncertain in the court's opinion to support a claim of prior manufacture, that the oral testimony of witnesses speaking from memory only in respect to past transactions and old structures claimed to anticipate the patented device, physical evidence of which is not produced, is very unreliable and must be so clear and satisfactory as to convince a court beyond a reasonable doubt before it will be accepted as establishing anticipation, is a rule that has long been recognized by the courts," and cases are cited. [610]

It goes on, and I quote:

"If anticipation is to be found in drawings unaided by any text, the disclosure must be clear. Chapman's Fig. 5 makes no such clear disclosure. Defendant's interpretation is pure conjecture and insufficient to support the defense of anticipation."

Your Honor will remember Johnson in his patent described pre-mixing action in a weigh batcher for concrete. He spelled out in detail how the aggregates are to be brought together at the point of discharge and that the cement was to flow onto and into the aggregate.

Your Honor will remember the defendant's structures were shown by Exhibit 14, to which no significant exception is taken by the defendant.

Has the defense proven its case of anticipation?

I have this to say about the credibility of Murasko's and Cornett's testimony. First, I would

like to say that at the beginning of Murasko's testimony, defendant's drawing, Exhibit A, was placed before him and from that he began to testify. There was considerable voir dire after that, and it was agreed by the court since the drawing was not in evidence it should be removed from in front of him.

He then went on to testify and made a drawing entitled Defendant's Exhibit E. Now, this was a man who testified that at the time he was operating on this plant he had [611] nothing to do with drawings and was there only to operate the plant and see that it worked properly. He was a batch operator. I would say in my limited experience that is about one level above a common laborer. He is talking about something that he looked at some 23 to 25 years ago. I suggest that it is more than mere coincidence that the drawing he made resembles Defendant's Exhibit A.

I would ask the court to look closer at Defendant's Exhibit A.

During Murasko's testimony, he said that the walls surrounding the cement compartment terminated considerably short of the bottom of the aggregate compartment. That doesn't conform, but certainly conforms to defendant's case of anticipation, and it was rather convenient, I think, that Murasko would find that point of distinction over the other evidence placed into evidence by the defendant.

Murasko also stated in his testimony that the aggregate batcher that he operated was six inches from the ceiling and that the cement batcher was

six inches from the cement compartment and that the aggregate batcher was three feet from the ceiling. That is not corroborated by that drawing.

Murasko further said that to him there was no problem as to how the materials went into the mixer, in answer to a question of the court's. Murasko said there was a cement hopper inside of an aggregate hopper. You can't tell that [612] from defendant's Exhibit A.

In making his drawing, Murasko forgot all about a tunnel or baffle which was later put into that Exhibit E by the witness Cornett. At the time there was no such showing in Defendant's Exhibit E. Murasko testified that the aggregate completely surrounded the cement and intermingled with the cement.

Now, what about the witness Cornett? All of Cornett's testimony was given with Defendant's Exhibit E laid before him. I respectfully suggest that that leaves considerable doubt as to whether he was testifying from his recollection or from the drawings that he was being shown.

Further, Cornett said that the cement hit the aggregate three-quarters of the way up or down the chute, and that was left considerably in doubt.

Cornett also said that the operating mechanism for the cement batcher gate that he saw was affixed to the aggregate batcher. When he saw he had talked himself into a corner, he conveniently put some springs on that operating mechanism and maintained that the springs had no effect upon the operation of the cement batcher.

Then when Cornett was interrogated as to the details of the weigh batcher he was describing by his recollection, I think it is interesting to note that he could describe every part in detail shown in the blueprints later introduced [613] in evidence by the defendants. But when co-counsel interrogated him about the detail of the aggregate discharge gate, he couldn't recollect anything, and if your Honor will examine all the blueprints introduced in evidence by the defendants, you won't find a showing of the aggregate discharge gate or exactly how the aggregate hopper discharge was arranged.

What about the drawings themselves? I believe if you will look at the drawings you will see that in various details they don't conform to the testimony of either Murasko or Cornett, and that any attempt to make them conform to that testimony must rely on pure conjecture as to just how the apparatus was arranged.

Co-counsel has further pointed out that there is no testimony in the record to show that such a batcher as indicated by those drawings has ever been made or delivered or used publicly.

I think I have shown, your Honor, that in various details, and if we take everything at face value, three different types of weigh batchers have been testified to—two have been testified to and the third there has been an attempt made to put in by drawings, presumably as corroboration, but I submit there has been no corroboration, and particularly if you will observe the testimony as to the details of the discharge of the cement and aggregate

batcher, you will find that the drawings don't conform to what the witnesses would like us to believe existed some 23 or 25 years ago. In other words, there [614] has been no corroboration.

From the drawings, you can't tell what the aggregate hopper looked like and particularly you can't tell what its discharge looked like. If anything, it looks more like the structure shown in the Robb patent.

I respectfully submit that there is no dovetailing of the type earlier mentioned by your Honor.

There is also left the question if a batching apparatus as testified to was used at that time, whether or not that use was experimental. The batch operators wouldn't know if it was experimental or not. Only its designer and fabricator could testify to what was in his mind at that time and whether it was satisfactory or not. But I would suggest that the defendants have shown there was some experimentation because the drawing you are looking at, Defendant's Exhibit A, has a date——

The Court: December 4, 1931.

Mr. Denny: December 4, 1931. Defendants also put into evidence their Exhibit H, and I presume that they intended it to show some relationship to the alleged anticipating structure they were talking about. It shows as late as April 13, 1933, changes were being made to that aggregate batcher. If these drawings are to be believed and are properly in evidence, I suggest that they as well prove that this structure was being used experimentally. Changes were made at least two years [615] after the date

alleged by defendants, and for that matter changes may have been made an additional two years later and the batcher would not be good as an anticipation.

If your Honor will also again refer to Defendant's Exhibits A and E, you will see that there is here shown what the defense identified as a tunnel which contained the operating mechanism for the cement batcher discharge gate, pointing to Exhibit A. This was also placed into Defendant's Exhibit E by the witness Cornett.

I point out it is rather interesting that the tunnel ended upon the same side as the drawing here, and that the witness said in his conclusion the aggregate still completely surrounded the cement.

Before you decide, your Honor, whether or not the aggregate in this structure could have completely surrounded the cement or not, I would like to read a portion of defendant's pretrial memorandum, page 14——

The Court: Just a minute. I am going to give you until 4:00 o'clock. You have got five minutes left.

Mr. Denny: I will be done if you will let me read it.

The Court: Go ahead and read it. I don't care how you use the five minutes, but that is all the time you are going to get. You have had over an hour.

Mr. Denny: I will read from defendant's pre-trial memorandum as follows: [616]

“Defendant likewise will establish at the trial

that this claim has never been infringed. Defendant does not and never has built a cement batching apparatus wherein the discharge means are concentrically disposed in serving to produce commingling of the cement and coarser aggregate. Defendant's cementing apparatus consists of three hoppers positioned alongside of each other, the central hopper containing cement and being suspended from one scale, the other two hoppers containing aggregate material and being suspended from a second scale, in much the same manner as illustrated in the Robb patent No. 1,750,244. There is no concentric discharge. In this respect reference is made to Fig. 5 of the Johnson patent which shows a concentric discharge and shows what this language utilized in the claim means. It will be noted that the cement discharge is completely surrounded by the aggregate materials so that the cement discharge and aggregate discharge truly concentric. Defendant does not use this arrangement. In defendant's arrangement the aggregate flows along one stream, then a stream of cement, then a second stream of aggregate. There is no concentric discharge [617] and the functioning of defendant's device is the same as the prior art."

Well, your Honor, I submit that the evidence proved that the defendant was not right in his position here on the question of infringement, but if a device such as alleged here does not infringe, it does not anticipate. There are cases on that. Here if, because the aggregate does not surround the cement so as to produce a concentric discharge,

I would submit it couldn't be an anticipation on the basis of what is shown here alone.

Thank you, your Honor.

The Court: Before we proceed, Mr. Lyon, we have a criminal matter I would like to dispose of.

(Other court matters were taken up.)

The Court: Mr. Lyon, I will give you 30 minutes. The only thing I am interested in is the question of the plant in San Francisco and the admissibility of the blueprints.

Mr. Lyon: Your Honor, please, there is a very serious question whether or not there is any invention in this patent and I hate to confine myself to one defense at this time because I believe the other defenses are equally as good.

The only testimony in the record which would have any bearing whatsoever on this invention, as your Honor so aptly tagged it, when Mr. Wright was on the stand, was merely speculation. Never any test run to show that this plant did [618] what it is claimed to have done by the plaintiff.

The testimony of their own witness, Mr. Pearman, said that none of these intermingling or commingling things took place.

The testimony of Mr. Wisniski, who has been an expert in this field for many, many years and held very high and responsible jobs, said that this was all a bunch of nonsense, that this commingling or intermingling, or whatever happened, produced no useful result whatsoever, that it was only when you got the intermixing in the hopper that was placed

underneath that you got any useful action whatsoever.

I hate to confine myself to this one particular defense, and with your Honor's permission I would like to go into the others.

The Court: Go ahead and use the time any way you want.

Mr. Lyon: I will take up the question of prior use first, because that seems to be the one your Honor is most interested in.

The Court: You will admit, won't you, if there is any prior use, the patent is no good?

Mr. Lyon: That is correct.

The Court: Doesn't that end the case?

Mr. Lyon: As far as we are concerned, barring the question of their going up on appeal, and if they go up on appeal, I would like to have a decision that there is no invention on [619] this patent.

Mr. Bodinson, who is the president of the Bode Rock Company, testified that it was the policy of this company to make drawings of every construction they ever made. He testified it was the policy of this company to keep these drawings in a certain specified file as per job.

The plaintiff has made the argument that these were not kept in the regular course of business. I have a lot of difficulty understanding just precisely what we are talking about. Section 1732 specifies this.

Such documents are admissible if made in the regular course of business.

I don't think there is any question in this case that they were made in the regular course of business. That is the only testimony before this court. There is no other testimony whatsoever would suggest in any way that these have been——

The Court: Well, the question here is, supposing an engineering firm or a draftsman or an architect draws plans for a building. The building is built and then the plans are given over to the owner of the building and the owner of the building files them in his records. Who made the plans? They were made in the usual course of business as far as the architect was concerned, but were they also made in the regular course of business as far as the owner is concerned?

Mr. Lyon: Well, in this instance, your Honor, you will [620] remember the Bodison Gravel Company were the people who manufactured the plant and it was their record, not the owner of the plant, but the man who built the plant.

The Court: The record of the builder we have got here.

Mr. Lyon: That is correct, sir, of what his business transactions were. I don't see what other way a construction corporation can keep any records of anything that it does. I mean if those aren't records kept in the regular course of business, a construction organization doesn't have any records in the ordinary course of business.

There is one further point, your Honor, the plaintiff didn't touch on at all, the question of these job orders.

Mr. Bodinson testified in his organization as soon as the plans are made up they send out a job order to the department who is going to do the specific work.

The Court: Yes, I know, but I don't think the plaintiff is contesting very seriously that this plant wasn't built when you say it was built. They are contesting that the plant didn't contain what you said it contained. The job order is only piecemeal. It doesn't show the inner workings of the plant. The job order goes to establish the fact of when the building was built or the plant was built. It doesn't indicate what was inside the plant.

Mr. Lyon: I am convinced the plant was built in 1931. I want to make certain you are. [621]

The Court: I am, also. I have no question of that.

Mr. Lyon: As to the construction of this plant, we have the testimony of Mr. Murasko and Mr. Cornett. Mr. Cornett was busy operating this plant from 1933 until 1947. This is not the type of case the plaintiff tries to make out it was, where the testimony is, well, on the 23rd of August, 1934, I saw one of these. This isn't that type of situation. This is where a man day in and day out for 14 years worked at the plant. There is no question but what he was there. There is no evidence to the contrary at all.

Mr. Murasko was there from 1931 to 1942. That is 11 years he worked on this same plant. He ran it every day, or if he didn't run it, he was right

there while the other man was running it. No question but what the plant was there and these gentlemen were there for a minimum period of 11 years. This is not the type of situation they are talking about in the barbed wire case where they bring in a cattleman who says, "Yes, in October, 1923, I saw one of those on a fence."

That is not the kind of testimony we have here. We have testimony from men who were with this job for 10 or 15 years every day, and they saw this plant, operated this plant, ran it. They testified as to how that plant was constructed.

They testified there was a hopper for the aggregate material. There was a second hopper for the cement material, [622] suspended within this hopper.

Each hopper was suspended from separate scales.

I might remind your Honor that these claims, as far as claim 1 of the patent goes, it doesn't describe any of these details. There is nothing in that claim or in that patent that has anything to do with the formation of the discharge gate or any of that material. There was no question whatsoever that this structure contained a hopper within a hopper, each suspended from separate scales. That is all that is defined by claim 1.

The plaintiff has tried in many instances to try to build some inconsistency in the statements of these men. Remember Mr. Cornett was the white-haired gentleman who obviously was scared half to death when he was on the stand for fear he would do something, I don't know what. He was

a gentleman with modest education, a grammar school education, your Honor. He had been a plant operator all his life. He sat there and Mr. Sellers cross-examined him, I don't know how many minutes and hours went by while he kept asking him the same questions over and over and over again. Remember the trip he testified he took and Mr. Sellers would say, "Did you say that was in 1937?" And he would say, "No, correction, that was in 1936."

Then he would come back an hour later and say, "You said that was in 1937, didn't you?" And the witness would [623] say, "No, it was in 1936."

We had repeated efforts to try to break the man's story, to try to build some inconsistency into his story, none of which were successful.

In my mind there can't be any possible doubt that plant was there, it was there in 1931, and it was constructed with a hopper within a hopper suspended from separate scales. The witnesses have so testified.

Mr. Bodinson testified in 1946 or '47 when he was up there, it was so constructed. He could not testify how it was constructed in 1931. There is nothing to show the plant was changed in the whole course of that time. There were, of course, parts that wear out on a plant of this type and there was testimony of the defendant's other witnesses there might be replacement of parts.

But I believe the witnesses, all three of them, their testimony as to the construction of the plant leaves beyond any question that the vital elements

of the claim were in it, the question of a hopper within a hopper, each suspended from separate scales, and that is all that claim calls for, your Honor.

So we have this situation. We do not have an individual witness trying to testify as to an individual so-called prior use. We have Mr. Murasko, who testified that he operated this plant from 1931 to 1942. He testified as to the manner [624] in which the plant was constructed.

We have his testimony supported by that of a second witness, Mr. Cornett, who testified that he was working on that plant daily from 1933 until 1947.

We have that testimony corroborated by the drawings which show the construction of the device and show a hopper within a hopper construction. Plaintiff's Exhibit A shows that construction, your Honor, shows a hopper disposed within a hopper.

The central drawing right there shows just exactly that construction, just exactly in the manner it is shown in the charts which the plaintiff had prepared. It shows the accused structure.

The more difficult question in this case—well, not more difficult, but one which I think also needs some consideration, is the fact that this patent does not purport to claim as its invention a cement batching apparatus. I call your Honor's attention to the language of the first paragraph of the patent:

“Though the invention is susceptible of use in any connection where a number of different kinds of aggregate materials are being proportioned * * *”

The patentee in that statement says, "I do not intend, I don't want this patent construed as limited to cement batching apparatus. This invention is susceptible of use in any type [625] of batching apparatus."

Claim 1 of the patent does not confine the definition of the invention to a batching apparatus—I mean to a cement batching apparatus. Pardon me. It says, "in a batching apparatus of the class described * * *"

The patent endeavors to cover any and all forms of batching apparatus irrespective of whether it has to do with the particular cement problem or not. It is an attempt on the part of a patentee to monopolize this concept of placing one hopper within another hopper suspended from separate scales, irrespective of where it is used.

The Court of Appeals in the Ninth Circuit has, I think very aptly, disposed of this type of situation, where a patentee has claimed more than his invention, where he has tried to write a claim which is broader than what he has contributed to the art, and that is in *Winslow vs. Smith*, 108 U.S.P.Q. 25, where the Court of Appeals followed the decision of the Supreme Court in *Graver vs. Linde Air Products*.

You will recall the *Graver vs. Linde Air Products* case. That was a decision where in the District Court it was held that the patent was invalid because the claim called for silicates, and it was established at the trial only nine metallic silicates would operate and others would not.

The Court of Appeals reversed the District Court and said, "There is nothing in the patent that shows he intended [626] the word silicates as used in his claim as covering more than those that would work."

When the case went to the Supreme Court, the Supreme Court turned around and reversed the Court of Appeals.

"The court cannot rewrite or expand the claims of a patent. If a man overclaims an invention intentionally or unintentionally, it is the duty of the court to strike that claim down."

That was precisely the action taken in *Winslow vs. Smith*.

Your Honor, in any patent case the first question that must be answered is the question of whether there was an invention made. We can talk about everything else all day, but that is the first question you must decide.

When Mr. Sellers was presenting his case through the witness Wright, your Honor asked him, "What was the invention?"

Mr. Sellers' comment was that it was the concept of surrounding the cement with a shaft of aggregate.

Your Honor will recall the earlier Johnson patent 1,687,499. This patent is just as good prior art against the Johnson patent in suit as anybody else's.

This patent states, and this is what Johnson said some nine years earlier:

"Stated more specifically the invention aims [627] to provide a large hopper in which the aggregate

for the bath is stored and a smaller cement hopper having an outlet opening within said large hopper, the opening being closed by the aggregate initially fed into the large hopper whereby the cement flowing from the cement hopper will be surrounded by a layer of the aggregate and thereby held out of contact with the inner surface of the large hopper."

That is the invention of Johnson patent No. 1,687,499, not the patent in suit, yet when Mr. Sellers is asked, "What is the invention in this patent," he comes back to this very same paragraph and says this is also the invention of the patent in suit.

Your Honor, he was issued one patent covering that. He can't have a second. This one has expired.

It is merely an attempt to monopolize again that which he had gotten a patent on earlier.

The only thing Mr. Sellers could point to as new was the concept of surrounding the cement with the aggregate. His prior patent taught that some nine years before. There is no invention involved in this at all, your Honor.

When you asked the witness Mr. Wright what benefits he received out of this patent structure, he said, "Well, you get an intermingling."

I asked him myself, "Do you get an intermingling if [628] your discharges aren't specifically related to one another?"

He said, "No."

I asked the witness Pearman, "With the construction of a hopper within a hopper, do you get any kind of a"—I misspoke myself. I didn't mean

Mr. Pearman. I meant Mr. Pinne, I believe it was, whatever the name was.

Mr. Sellers: Pinne.

Mr. Lyon: I asked him, "What is it that gets this result, what is it that is supposedly better about this?"

He said, "If one discharge is concentric with the other discharge and if it is raised above it, then you get it, but if you don't have that relationship, then you don't get any of this so-called intermingling or commingling."

This relationship is not defined in claim 1. There is nothing in there about the discharge being concentric. There is nothing in there about one of them being positioned anywhere with respect to the other.

So that the whole plaintiff's case has been directed to the concept of obtaining this intermingling or commingling of the cement with the aggregate and yet that claim, claim 1, does not even mention it. There is nothing in that.

Your Honor is not permitted by the law to read into a claim any kind of a limit. You are not permitted by the statute or by the decisions of the Supreme Court to vary one bit the language that is in those claims. [629]

I think the best example of what is meant by that is presented by our Ninth Circuit Court of Appeals in *D. & H. Electric Co. vs. M. Stevens Manufacturing Company*, in 108 U.S.P.Q. 27. The claim in suit had reference to two items, that they were substantially at right angles to one another. The defendant in relating the same two items used

from 85 to 89 degrees. 90 degrees is right angles. They used 89.

The Court of Appeals said that is not substantially right angles. The claim says it has to be substantially right angles and that is not. It is a degree off. So there is no infringement of the claim.

I think the same situation is pertinent at the present time. This claim relates to a hopper within a hopper suspended from separate scales and nothing else. The claim does not define an invention, if there is one at all, your Honor.

We had a lot of conflicting testimony here as to whether or not there was any definite commingling or intermingling of the two ingredients.

When I got around to ask Mr. Wright on what he based his opinion, he voiced complete ignorance of the basic laws of physics as to free falling bodies. I couldn't intelligently interrogate the man. He didn't know whether heavier bodies fell faster or slower than light bodies. He did not know whether or not something made something else move sideways when it [630] was falling. Mr. Wright's testimony was sheer speculation, your Honor. The plaintiff never once in this case tried to establish any test that was ever taken to substantiate what was supposed to have been the result obtained.

Mr. Wisniski, who has been in the business since 1935, has held high important positions with the federal government, has been in cement work since he was out of college, testified you cannot anticipate what goes on in one of these things, that you have

got to run a test. He said, without running a test, I cannot tell you whether there is any intermingling or commingling or anything else.

Mr. Roger Pine was the draftsman who made the drawings. When I asked him on the stand, he said, "I can't tell you what that gate looks like, because when I got down under that plant, I couldn't see it."

In other words, your Honor, there is nothing here that would establish any of the so-called new, startling or unusual results which the plaintiff claims. There isn't one bit of proof to establish any one of them. It was merely speculation of witnesses who were testifying as paid experts for the plaintiff. When I asked the witness on what theory, he divorced himself from any knowledge of any of the theories by which this could result.

Now, after your Honor has covered the question of whether or not there is an invention, the second question that [631] must be answered in a patent case is whether or not the claimed device is that invention. I believe I have previously discussed that. The test has been fully set forth in the A. & P. case as to what constitutes a patentable invention. I have cited in my pretrial memorandum all the latest cases since that time. Your Honor, is probably familiar with some of them; as a matter of fact, probably familiar with all of them.

The Court: May I ask you a question?

Mr. Lyon: Yes, sir.

The Court: If I file a claim for a patent for

something that is already in the public domain, do I get a valid patent?

Mr. Lyon: No, sir. The Patent Office might issue it.

The Court: The patent is invalid; isn't it?

Mr. Lyon: That is correct, sir.

The Court: In this case if I find that the plant in San Francisco was built as testified to by the witnesses, that it is a replica of the plant that the plaintiff claims a patent on, isn't the patent invalid?

Mr. Lyon: That is correct, sir. That fully disposes of the validity of the patent. But I also suggest there is a second question, and that is the lack of invention in the first instance.

The Court: Well, the last time I tried a patent case and held it lacked invention, I was reversed, so I want to make sure I know about what is invention. I followed the [632] Supreme Court, but the Circuit said I didn't follow it right.

Mr. Lyon: Well, let me refresh your memory once again. Remember the Kwikset Lock case vs. Hilgren.

The Court: Yes; I remember that.

Mr. Lyon: Your Honor, this is one of the most difficult fields of patent law, to ascertain when and when not an invention is involved, and a combination of mechanical elements. The Supreme Court has never, nor has any other text writer or court, ever evolved a definition that would help define invention. They have evolved a number of definitions if you feel there is no invention.

The one that they seem to rely upon most heavily now is probably summarized by the comment of the Ninth Circuit Court of Appeals. If your Honor can put the elements of this claim together and have two plus two equal five, you have got invention, but if two plus two comes out to equal four, you have got merely an old, exhausted combination of elements. In other words, let us put all these individual elements together——

The Court: Mr. Lyon, at the time we were trying this case and at the time you were introducing your testimony as to the plant that was built in San Francisco, I said if I believe the testimony of this witness, here was a plant built practically identical to the plant you claim to have a patent on—I was talking to the plaintiff's attorney. I haven't [633] changed my mind in regard to that manner.

Then again I said it seems to me, Mr. Sellers, if I am convinced that here was a plant that was built in San Francisco in 1931 practically the same as the plant described in your patent, which was filed in 1937, if I am convinced that there was prior use prior to the obtaining or the filing of this patent, it would seem it would be very unjust at this date to award damages on a patent that I am convinced was illegal and void from the very beginning.

That was my opinion then when I was hearing the witness, and it is still my opinion. It seems to me that the claims of the patent can be read upon the plant that was built in San Francisco.

Mr. Lyon: I agree with your Honor completely. There is no question in my mind.

The Court: So, I don't think it is necessary to extend this matter any further. I am going to find that the plant in San Francisco was built prior to the date of the application for the patent in suit, and that the claims of the patent in suit read upon the claims of the plant in San Francisco, and because of that the patent is illegal and void.

Mr. Sellers: May I ask, your Honor, is your Honor basing that solely upon the testimony of the witnesses Murasko and Cornett, or are you——

The Court: I am basing it upon the testimony of all the [634] witnesses, all the evidence in the case, not just one witness.

Mr. Sellers: May I ask, are you including in that the evidence produced by Mr. Bodinson under the business records?

The Court: I am including all of the evidence that was introduced, all of it.

Mr. Sellers: Thank you, your Honor.

The Court: I am satisfied that my ruling is correct relative to the introduction of the drawings. You have a perfect right to test my judgment in that case. I have no objection, if you want to appeal. It is perfectly all right with me. If the Circuit wants to reverse, it is perfectly all right with me.

Also, as I indicated in my statement the other day, I will not award costs or attorney's fees to either side. Each side will bear their own costs. Now, I may say that that only applies to this trial. If there is an appeal and a reversal and it comes

back, then I will consider the question of awarding attorneys' fees and costs on a new trial and the appeal, not upon the old trial.

As far as I am concerned, from this time on there will be no costs and no attorney's fees, but I have an open mind if anything happens in the future. You understand, do you?

So if there is an appeal and if counsel feels that—and I am satisfied he feels that an appeal should be taken if [635] his client will agree an appeal should be taken, and there is a reversal and the case comes back, then I will consider costs and attorneys' fees relative to the new litigation from this time onward. But my order relative to costs and attorneys' fees stops with the filing of the judgment.

Court will stand in recess.

Mr. Sellers: Your Honor, may I ask before we stop, does that apply to claim 5, too? You remember there is not one iota of evidence relating to anticipation of claim 5. Claim 1, yes; but the plant in San Francisco was never alleged to have circular water means.

The Court: I am satisfied it applies to the entire suit.

Now, Mr. Lyon, will you prepare the findings of fact according to the rules?

Mr. Lyon: Yes, sir.

The Court: All right. Court will stand in recess until 10:00 o'clock tomorrow morning.

[Endorsed]: Filed June 28, 1956. [636]

[Title of District Court and Cause.]

CERTIFICATE BY CLERK

I, John A. Childress, Clerk of the United States District Court for the Southern District of California, do hereby certify that the foregoing pages numbered 1 to 97, inclusive, contain the original

Complaint;

Answer;

Plaintiff's Pre-trial Memorandum;

Motion of Attorneys for Defendant to Withdraw from the Case;

Affidavit of H. Calvin White;

Order re Motion of Attorneys for Defendant to Withdraw from Case;

Notice Under Title 35 U.S.C. 282;

Notice of Hearing;

Plaintiff's Memorandum of Points and Authorities in Opposition to Defendant's Motion for Continuance;

Affidavit in Support of Memorandum of Points and Authorities in Opposition to Defendant's Motion for Continuance;

Defendant's Pretrial Memorandum;

Reply to Defendant's Pretrial Memorandum;

Findings of Fact, Conclusions of Law and Judgment;

Notice of Appeal;

Statement of Points Upon Which Plaintiff Appellant Intends to Rely;

Plaintiff's Designation of Contents of Record on Appeal;

Order for Extension of Time to Docket Record on Appeal;

Order by Stipulation that the Reporter's Transcript of Proceedings May Be Corrected by Hand-Written Insertions;

which, together with 5 volumes of reporter's transcript of proceedings and plaintiff's exhibits 1 to 20, inclusive, and defendant's exhibits A to Q, inclusive, except C & D which were withdrawn.

I further certify that my fees for preparing the foregoing record amount to \$2.00, which sum has been paid by appellants.

Witness my hand and seal of the said District Court this 30th day of August, 1956.

[Seal] JOHN A. CHILDRESS,
Clerk;

By /s/ CHARLES E. JONES,
Deputy.

[Endorsed]: No. 15249. United States Court of Appeals for the Ninth Circuit. C. S. Johnson Company, a corporation, Appellant, vs. Merle W. Stromberg, doing business as California Batching Equipment Co., Appellee. Transcript of Record. Appeal from the United States District Court for the Southern District of California, Central Division.

Filed August 31, 1956.

/s/ PAUL P. O'BRIEN,
Clerk of the United States Court of Appeals for
the Ninth Circuit.